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UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
WESTERN DIVISION

UNITED STATES OF AMERICA  
and PEOPLE OF THE STATE OF  
CALIFORNIA, *ex rel.* CALIFORNIA  
DEPARTMENT OF FISH AND  
WILDLIFE and CALIFORNIA  
REGIONAL WATER QUALITY  
CONTROL BOARD, CENTRAL  
COAST REGION,

Plaintiffs,

v.

HVI CAT CANYON, INC., f/k/a  
GREKA OIL & GAS, INC.,

Defendant.

CV 11-05097 FMO (SSx)

**UNITED STATES' POST-TRIAL  
PROPOSED FINDINGS OF FACT**

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**TABLE OF ACRONYMS**

CWA:	The Clean Water Act, 33 U.S.C. § 1251 <i>et seq.</i>
DFW:	The State of California Department of Fish and Wildlife
EPA:	The United States Environmental Protection Agency
FRP:	Facility Response Plan
ICS:	Incident Command System
NRC:	National Response Center
OES:	The California Office of Emergency Services
OPA:	The Oil Pollution Act of 1990, 33 U.S.C. § 2701 <i>et seq.</i>
PMP:	Pipeline Integrity Management Plan
SPCC:	Spill Prevention, Control, and Countermeasure

1 The United States respectfully submits the following proposed findings of  
2 fact for the Court's use and consideration in making its independent findings.

3  
4 **FINDINGS OF FACT**

5 **I. BACKGROUND**

6 **A. Procedural Background**

7 1. Plaintiffs filed their complaint in this action on June 17, 2001, Dkt. No.  
8 1, and filed their First Amended Complaint (hereinafter "Complaint") on February  
9 28, 2013, Dkt. No. 56. In the Complaint, the United States alleges claims against  
10 Defendant HVI Cat Canyon, Inc. ("HVI"), formerly named Greka Oil & Gas, Inc.,  
11 for: oil spills in violation of Sections 301 and 311 of the Clean Water Act  
12 ("CWA"); failure to prepare and implement and/or maintain Spill Prevention,  
13 Control, and Countermeasure ("SPCC") Plans and Facility Response Plans  
14 ("FRPs") at its oil production facilities; and failure to reimburse the United States'  
15 costs under the Oil Pollution Act of 1990 ("OPA"). *Id.* The People of the State of  
16 California, *ex rel.* California Department of Fish and Wildlife and the California  
17 Regional Water Quality Control Board, Central Coast Region (the "State") joined  
18 in the majority of these claims, and presented additional claims under state law. *Id.*

19 2. On March 15, 2017, the United States filed its motion for partial  
20 summary judgment. Dkt. No. 252-1 ("United States' Summary Judgment  
21 Motion"). The United States' Summary Judgment Motion sought judgment on four  
22 issues: (1) HVI's liability under Section 311(b) of the CWA, 33 U.S.C. § 1321, for  
23 12 oil spills at HVI's Bell and Zaca Facilities; (2) HVI's liability under Section  
24 301(a) of the CWA, 33 U.S.C. § 1311(a), for the 12 spills; (3) HVI's liability under  
25 Section 1002(a) of the OPA, 33 U.S.C. § 2702(a), for the payment of removal costs  
26 incurred by the United States in connection with six spills or threatened spills; and  
27 (4) the amount of removal costs for which HVI is liable: \$2,486,884.77 plus  
28 interest. *Id.* 1:23-2:5.

1           3. On May 20, 2018, the Court ruled on the United States' Summary  
2 Judgment Motion, holding that:

3           a. HVI is liable, under Sections 311 and 301 of the CWA, 33 U.S.C.  
4 §§ 1321(b) and 1311(a), for 10 of the 12 spills at issue in the United States'  
5 Complaint: the June 8, 2005, July 13, 2005, August 11, 2005, July 16, 2007,  
6 December 7, 2007, January 29, 2008, October 14, 2010, and December 21, 2010  
7 spills at the Bell Facility, and the December 7, 2005 and January 5, 2008 spills at  
8 the Davis Facility. Dkt. No. 307 at 38:1-5 (Partial Summary Judgment Order).

9           b. HVI is liable under § 1002(a) of the OPA, 33 U.S.C. § 2702(a), for  
10 the United States' removal costs in connection with the January 29, 2008, and  
11 December 21, 2010 spills at the Bell Facility, the January 5, 2008 spill at the  
12 Davis Facility, and the March 2008 Williams B. Facility tank farm removal  
13 action. Id. at 38:5-8. The total removal costs incurred in connection with these  
14 incidents for which HVI is liable are \$2,243,686.78 plus interest. Id. at 38:12-13.

15           c. Triable issues of fact remained as to whether Sisquoc Creek and  
16 Spring Canyon Tributary are jurisdictional waters under the CWA, Id. at  
17 24:10-11, 25:4-5 and 37:14-18, and accordingly summary judgment was denied as  
18 to: (1) HVI's liability under Sections 311 and 301 of the CWA, 33 U.S.C.  
19 §§ 1321(b) and 1311(a), for the December 27, 2008 and May 1, 2009 Bell Facility  
20 spills; and (2) HVI's liability under § 1002(a) of the OPA, 33 U.S.C. § 2702(a),  
21 for the United States' removal costs in connection with the December 27, 2008  
22 Bell Facility spill and the April 2008 Gato Ponds removal action. Id. at 38:9-11.

23           **B. HVI's Oil Production Facilities and Operations in Santa**  
24           **Barbara County**

25           4. HVI is a corporation headquartered in Santa Maria, California, that was  
26 until 2011 named Greka Oil & Gas, Inc. Dkt. No. 62 ¶ 5 (Answer to First  
27 Amended Complaint, hereinafter "Answer").  
28

1           5. HVI owns and/or operates, or has owned and/or operated, a number of  
2 oil and gas production facilities in Santa Barbara County, California, including the  
3 following 11 facilities relevant to this case:

4           a. The **Battles Facility**, located at 1348 Battles Road, Santa Maria,  
5 California, has been owned and operated by HVI since November 1999. Answer  
6 ¶ 16; TREX US2535 at 5, 8, and 9 (HVI's Responses to Requests for Admission  
7 ("RFA")); TREX US2399 at HVI003910 (HVI 308 Response). Absent evidence  
8 of specific a date of acquisition, the Court conservatively uses the date of  
9 November 30, 1999, for purposes of penalty calculation. The Battles Facility is  
10 engaged in drilling, producing, gathering, or storing oil or oil products. TREX  
11 US2535 at 8, 9 (RFA).

12           b. The **Bell Facility**, located at 6780 Palmer Road, Santa Maria,  
13 California, has been owned and operated by HVI since November 1999. Answer  
14 ¶¶ 16, 46; TREX US2535 at 21, 24, 25 (RFA); TREX US2399 at HVI003910  
15 (HVI 308 Response). Absent evidence of a specific date of acquisition, the Court  
16 conservatively uses the date of November 30, 1999, for purposes of penalty  
17 calculation. The Bell Facility is engaged in drilling, producing, gathering, or  
18 storing oil or oil products. TREX US2535 at 24, 25 (RFA).

19           c. The **Casmalia Facility**, located at 5080 Black Road, Santa Maria,  
20 California, has been owned and operated by HVI since November, 1999. Answer  
21 ¶ 16; TREX US2535 at 39, 42, 43 (RFA); TREX US2399 at HVI003911 (HVI  
22 308 Response). Absent evidence of a specific date of acquisition, the Court  
23 conservatively uses the date of November 30, 1999, for purposes of penalty  
24 calculation. The Casmalia Facility is engaged in drilling, producing, gathering, or  
25 storing oil or oil products. TREX US2535 at 42, 43 (RFA).

26           d. The **Escolle Facility**, located at 7275 Graciosa Road, Santa Maria,  
27 California, has been owned and operated by HVI since November 1999. Answer  
28 ¶ 16; TREX US2535 at 84, 87, 88 (RFA); TREX US2399 at HVI003911 (HVI



1 HVI 308 Response). Absent evidence of a specific date of acquisition, the Court  
2 conservatively uses the date of November 30, 1999, for purposes of penalty  
3 calculation. The Escolle Facility is engaged in drilling, producing, gathering, or  
4 storing oil or oil products. TREX US2535 at 87, 88 (RFA).

5 e. The **Lakeview Facility**, located at 2617 East Clark Avenue, Santa  
6 Maria, California, has been owned and operated by HVI since August 2002.  
7 Answer ¶¶ 70, 71; TREX US2535 at 100 (RFA); TREX US2399 at HVI003910  
8 (HVI 308 Response); TREX US2863 at EPA9\_0008925 (SPCC Plan). Absent  
9 evidence of a specific date of acquisition, the Court conservatively uses the date of  
10 August 31, 2002, for purposes of penalty calculation. The Lakeview Facility is  
11 engaged in drilling, producing, gathering, or storing oil or oil products. TREX  
12 US2863 at EPA9\_0008919 (residues in tanks and vessels); Dkt. No. 345-1  
13 (Calhoon Decl.) at ¶ 21(d) (tanks at Lakeview had not been clean-closed).

14 f. The **Lloyd Facility**, located at 5200 Dominion Road, Santa Maria,  
15 California, has been owned and operated by HVI since August 2002. Answer  
16 ¶ 16; TREX US2535 at 112 (RFA); TREX US2399 at HVI003911 (HVI 308  
17 Response). Absent evidence of a specific date of acquisition, the Court  
18 conservatively uses the date of August 31, 2002, for purposes of penalty  
19 calculation. The Lloyd Facility is engaged in drilling, producing, gathering, or  
20 storing oil or oil products. TREX US2399 at HVI003911 (HVI 308 Response).

21 g. The **Los Flores Facility**, located at 6151 Dominion Road, Santa  
22 Maria, California, has been owned and operated by HVI since August 2002.  
23 Answer ¶¶ 16, 69; TREX US2535 at 126, 129, 130 (RFA); TREX US2399 at  
24 HVI003911 (HVI 308 Response). Absent evidence of a specific date of  
25 acquisition, the Court conservatively uses the date of August 31, 2002, for  
26 purposes of penalty calculation. The Los Flores Facility is engaged in drilling,  
27 producing, gathering, or storing oil or oil products. RFA 129, 130.  
28

1           h. The **Security Facility**, located at 5200 Dominion Road, Santa  
2 Maria, California, has been owned and operated by HVI since August 2002.  
3 Answer ¶ 16; TREX US2535 at 140, 143, 144 (RFA); TREX US2399 at  
4 HVI003911 (HVI 308 Response). Absent evidence of a specific date of  
5 acquisition, the Court conservatively uses the date of August 31, 2002, for  
6 purposes of penalty calculation. The Security Facility is engaged in drilling,  
7 producing, gathering, or storing oil or oil products. TREX US2535 at 143, 144  
8 (RFA).

9           i. The **U-Cal Facility**, located at 6527 Dominion Road, Santa Maria,  
10 California, was owned or operated by HVI from August 2002 to December 31,  
11 2008. Answer ¶¶ 16, 69; TREX US2535 157, 158 (RFA); TREX US2399 at  
12 HVI003911 (HVI 308 Response). Absent evidence of a specific date of  
13 acquisition, the Court conservatively uses the date of August 31, 2002, for  
14 purposes of penalty calculation. The U-Cal Facility was engaged in drilling,  
15 producing, gathering, or storing oil or oil products during HVI's periods of  
16 ownership or operation. TREX US2535 at 157, 158 (RFA).

17           j. The **Williams B. Facility**, located on Cat Canyon Road, Santa  
18 Maria, California, was owned by HVI from at least June 2000 to February 25,  
19 2010. Answer ¶ 16; TREX US2535 at 171 (RFA); TREX US2399 at HVI003911  
20 (HVI 308 Response). HVI engaged in drilling, producing, gathering, or storing oil  
21 or oil products at the Williams B. Facility. TREX US2399 at HVI003911 (HVI  
22 308 Response); TREX US2857 at EPA9\_050142 (Fullerton SPCC Plan showing  
23 production at Williams B. wells); Dkt. No. 345-2 (Reich Decl.) at ¶ 65 (tanks  
24 containing oil and oily water). Absent evidence of a specific date of acquisition,  
25 the Court conservatively uses the date of June 30, 2000, for purposes of penalty  
26 calculation.

27           k. The **Zaca Facility**, located at 5017 Zaca Station Road, Los Olivos,  
28 California, has been owned and operated by HVI since August 2002. Answer

¶¶ 16, 69–71; TREX US2535 at 53, 56, 57, 67, 70, 71 (RFA); TREX US2399 at HVI003912 (HVI 308 Response). Absent evidence of a specific date of acquisition, the Court conservatively uses the date of August 31, 2002, for purposes of penalty calculation. The Zaca Facility is engaged in drilling, producing, gathering, or storing oil or oil products. TREX US2535 at 56, 57, 70, 71 (RFA). The Zaca Facility includes the Chamberlin and Davis Tank Batteries and the Chamberlin and Davis Leases. TREX US2839 at HVI016668–75 (2005 Zaca SPCC Plan). The parties and the Court have also at various times referred to the Zaca Facility as the “Davis Facility.”

**C. Characteristics of Specific Water Bodies** (*Palmer Road Creek, Sisquoc Creek, Cat Canyon Creek, and Spring Canyon Tributary*)

6. With respect to the two remaining spills and substantial threat of a spill, Dr. Lyndon Lee, an expert in river and wetland science, testified that based on data reviewed and his direct observations both the Sisquoc Creek and the Spring Canyon Tributary have clear and prominent channel beds, banks, ordinary high water marks, and regularly connect through the Cat Canyon Creek and Sisquoc River riverine systems to the Santa Maria Estuary which flows into the near shore waters of the Pacific Ocean. Dkt. No. 344-1 (Lee Decl.) at ¶¶ 13–26; Dkt. No. 469 at 18:19–34:9 (10/24/18 Trial Tr. Vol. 1 Test. of Lee).

7. Dr. Lee further testified that the contribution of Palmer Road Creek, Spring Canyon Tributary, and Cat Canyon Creek to the chemical, physical, and biological integrity of the Santa Maria Estuary is significant. *Id.*; Dkt. No. 344-1 (Lee Decl.) at ¶¶ 13–14, 16–19, 20–21, 23–24; Dkt. No. 469 at 18:19–34:9 (10/24/18 Trial Tr. Vol. 1 Test. of Lee).

8. Dr. Lee’s testimony is credible, and provides sufficient basis for the Court to determine that both the Sisquoc Creek and the Spring Canyon Tributary have a significant nexus to traditional navigable waters.

1           9. HVI's expert, Dr. Michael Josselyn, does not dispute that the Spring  
2 Canyon Tributary has ordinary high water marks and provides flow to a traditional  
3 navigable water. Dkt. No. 469 at 66:3–67:14 (10/24/18 Trial Tr. Vol. I, Test. of  
4 Josselyn).

5           10. Dr. Josselyn also does not dispute that the Palmer Road Creek—which  
6 receives flow from the Sisquoc Creek—provides flow to a traditional navigable  
7 water. Dkt. No. 469 at 67:15-17 (10/24/18 Trial Tr. Vol. I, Test. of Josselyn); Dkt.  
8 No. 469 at 22:23-24:5 (10/24/18 Trial Tr. Vol. I, Test. of Lee); Dkt. No. 344-5  
9 (Lee Decl.) at 7 (figure showing Cat Canyon Creek Stream Order and Reach  
10 Lengths).

11           11. Based on Dr. Lee's testimony and related exhibits, both the Sisquoc  
12 Creek and the Spring Canyon Tributary have a significant nexus to traditional  
13 navigable waters.

## 14           **II. TWELVE OIL SPILLS AT HVI'S BELL AND ZACA FACILITIES**

15           **12. Pipeline Spills at the Bell Facility.** On numerous occasions, HVI  
16 discharged oil (comprised of crude oil and produced water, which is crude oil and  
17 other constituents mixed with waste) from pipelines at its Bell Facility to waters of  
18 the United States:

19           a.       ***June 8, 2005 Bell Facility ("6/8/05 Bell Spill")***. On June 8,  
20 2005, HVI discharged crude oil and produced water from a pipeline at the Bell  
21 Facility. Answer ¶ 44. Oil from the spill reached Palmer Road Creek. TREX  
22 US1232 at EPA9\_0009426 (CAER Report). The Court has already found HVI  
23 liable for this spill under Sections 311 and 301 of the CWA, 33 U.S.C. §§ 1321(b)  
24 and 1311(a). Dkt. No. 307 at 38:1–5 (Partial Summary Judgment Order). HVI  
25 discharged 201 barrels of oil (one barrel of crude oil and 200 barrels of produced  
26 water) during the spill from the Bell Facility on June 8, 2005. Dkt. No. 442 at  
27 Admitted Fact ¶ 5.pp (Final Pretrial Conf. Order).  
28

1           b.       ***July 13, 2005 Bell Facility (“7/13/05 Bell Spill”)***: On July 13,  
2 2005, HVI discharged crude oil and produced water from a pipeline at the Bell  
3 Facility. Answer ¶ 44. Oil from the spill reached Palmer Road Creek. TREX  
4 US1252 at EPA9\_0009428 (CAER Report); Dkt. No. 345-14 (Boggs Decl.) at  
5 ¶¶ 8–10. The Court has already found HVI liable for this spill under Sections 311  
6 and 301 of the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No. 307 at 38:1-5  
7 (Partial Summary Judgment Order). HVI discharged 70 barrels of oil (20 barrels  
8 of crude oil and 50 barrels of produced water) during the spill from the Bell  
9 Facility on July 13, 2005. Dkt. No. 442 at Admitted Fact ¶ 5.qq (Final Pretrial  
10 Conf. Order).

11           c.       ***August 11, 2005 Bell Facility (“8/11/05 Bell Spill”)***: On  
12 August 11, 2005, HVI discharged crude oil and produced water from a pipeline at  
13 the Bell Facility. Answer ¶ 44. Oil from the spill reached Palmer Road Creek.  
14 TREX US1494 (CAER Report); Dkt. No. 345-14 (Boggs Decl.) at ¶¶ 17–18. The  
15 Court has already found HVI liable for this spill under Sections 311 and 301 of  
16 the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No. 307 at 38:1–5 (Partial  
17 Summary Judgment Order). HVI discharged 22 barrels of oil (2 barrels of crude  
18 oil and 20 barrels of produced water) during the spill from the Bell Facility on  
19 August 11, 2005. Dkt. No. 442 at Admitted Fact ¶ 5.rr (Final Pretrial Conf.  
20 Order).

21           d.       ***July 16, 2007 Bell Facility (“7/16/07 Bell Spill”)***: On July 16,  
22 2007, HVI discharged crude oil and produced water from a pipeline at the Bell  
23 Facility. Answer ¶ 36. Oil from the spill reached Palmer Road Creek. Dkt. No.  
24 434-3 (Dostal Decl.) at ¶¶ 8–12; TREX US1360 (CAER Report); Dkt. No. 400-11  
25 (Muñoz Dep. Vol. I) at 248:12–16, 249:3–6; Dkt. No. 400-14 (Sally Dep. Vol. I)  
26 at 101:1-8. The Court has already found HVI liable for this spill under Sections  
27 311 and 301 of the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No. 307 at  
28 38:1-5 (Partial Summary Judgment Order). As set forth below, HVI discharged

1 16,627 barrels of oil (294 barrels of crude oil and 16,333 barrels of produced  
2 water) during the spill from the Bell Facility on July 16, 2007.

3 e. ***January 29, 2008 Bell Facility (“1/29/08 Bell Spill”)***: On  
4 January 29, 2008, HVI discharged crude oil and produced water from a pipe at the  
5 Bell Facility. TREX US2016, RFA 363. Oil from the spill reached Palmer Road  
6 Creek. Dkt. No. 400-12 (Muñoz Dep. Vol. II) at 372:24-373:2; TREX US0092 at  
7 DFG000468 (Stipulation); Dkt. No. 434-3 (Dostal Decl.) at ¶¶ 36, 42. The Court  
8 has already found HVI liable for this spill under Sections 311 and 301 of the  
9 CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No. 307 at 38:1–5 (Partial  
10 Summary Judgment Order). As set forth below, HVI discharged and recovered  
11 125.9 barrels of oil from the spill from the Bell Facility on January 29, 2008.  
12 TREX US0092 (July 24, 2008 Stipulation Agreement).

13 f. ***December 27, 2008 Bell Facility (“12/27/08 Bell Spill”)***: On  
14 December 27, 2008, HVI discharged crude oil and produced water from a pipeline  
15 at the Bell Facility. Answer ¶ 44. Oil from the spill reached Spring Canyon  
16 Tributary. TREX US0676 (OES Spill Report); Dkt. No. 434-3 (Dostal Decl.) at  
17 ¶¶ 45, 48. HVI discharged and recovered four barrels of oil from the spill from the  
18 Bell Facility on December 27, 2008. Dkt. No. 442 at Admitted Fact ¶ 5.xx (Final  
19 Pretrial Conf. Order).

20 g. ***May 1, 2009 Bell Facility (“5/1/09 Bell Spill”)***: On May 9,  
21 2009, HVI discharged crude oil and produced water from a pipeline at the Bell  
22 Facility. Answer ¶ 44. Oil from the spill reached Spring Canyon Tributary. TREX  
23 US1223 at DFG025011 (Stipulation); TREX US1192 (CAER Report), Dkt. No.  
24 400-5 (Dimitrijevic Dep.) at 102:3–5; Dkt. No. 400-12 (Muñoz Dep. Vol. II at  
25 393:9-16); Dkt. No. 434-3 (Dostal Decl.) at ¶¶ 59–60. HVI discharged and  
26 recovered nine barrels of crude oil from the spill from the Bell Facility on May 1,  
27 2009. Dkt. No. 442 at Admitted Fact ¶ 5.yy (Final Pretrial Conf. Order).  
28



1           h.       ***October 14, 2010 Bell Facility (“10/14/10 Bell Spill”)***: On  
2       October 14, 2010, HVI discharged crude oil and produced water from a pipeline at  
3       the Bell Facility. Answer ¶ 44. Oil from the spill reached Palmer Road Creek.  
4       TREX US0572 at HVI036051 (HVI Failure Analysis); Dkt. No. 434-3 (Dostal  
5       Decl.) at ¶¶ 62–63. The Court has already found HVI liable for this spill under  
6       Sections 311 and 301 of the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No.  
7       307 at 38:1-5 (Partial Summary Judgment Order). HVI discharged 15 barrels of  
8       oil (ten barrels of crude oil and five barrels of produced water) from the spill from  
9       the Bell Facility on October 14, 2010. Dkt. No. 442 at Admitted Fact ¶ 5.zz (Final  
10      Pretrial Conf. Order).

11           i.       ***December 21, 2010 Bell Facility (“12/21/10 Bell Spill”)***: On  
12      December 21, 2010, HVI discharged crude oil and produced water from a pipeline  
13      at the Bell Facility. Answer ¶ 44. Oil from the spill reached Palmer Road Creek.  
14      The Court has already found HVI liable for this spill under Sections 311 and 301  
15      of the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No. 307 at 38:1-5 (Partial  
16      Summary Judgment Order). HVI discharged five barrels of oil (one barrel of  
17      crude oil and four barrels of produced water) from the spill from the Bell Facility  
18      on December 21, 2010. Dkt. No. 442 at Admitted Fact ¶ 5.aaa (Final Pretrial  
19      Conf. Order).

20           **13. Tank and Pond Spills at the Bell and Zaca Facilities.** On other  
21      occasions, HVI discharged oil (comprised of crude oil and produced water, which  
22      is crude oil and other constituents mixed with waste) from tanks and ponds at the  
23      Bell and Zaca Facilities to waters of the United States:

24           a.       ***December 7, 2005 Zaca Facility, Davis Tank Battery***  
25      ***(“12/7/05 Davis Spill”)***: On December 7, 2005, HVI discharged crude oil and  
26      produced water from Waste Water Tank #2 at the Zaca Facility’s Davis Tank  
27      Battery. Answer ¶ 21. Oil from the spill reached Zaca Tributary. Dkt. No. 414  
28      (Curtis Decl.) at ¶¶ 9-16; Dkt. No. 400-6 (Dimitrijevic 30(b)(6) Dep.) at 192:15–

1 193:1; TREX US0720 (CAER Report). The Court has already found HVI liable  
2 for this spill under Sections 311 and 301 of the CWA, 33 U.S.C. §§ 1321(b) and  
3 1311(a). Dkt. No. 307 at 38:1–5 (Partial Summary Judgment Order). As set forth  
4 below, HVI discharged 2,135 barrels of oil (2,135 barrels of crude oil and an  
5 unknown volume of produced water) during the spill from the Davis Tank Battery  
6 on December 7, 2005.

7       b. ***December 7, 2007 Bell Facility (“12/7/07 Bell Spill”)***: On  
8 December 7, 2007, HVI discharged crude oil and produced water from the  
9 Blochman Injection Pond at the Bell Facility. Answer ¶ 38. Oil from the spill  
10 reached Palmer Road Creek. Dkt. No. 400-6 (Dimitrijevic 30(b)(6) Dep.) at  
11 197:2–12, 200:10–20; TREX US1182 at HVI000538 (HVI 308 Response); TREX  
12 US0968 (CAER Report); Dkt. No. 400-11 (Muñoz Dep. Vol. I) at 74:5–19; Dkt.  
13 No. 400-12 (Muñoz Dep. Vol. II) at 325:7–24; Dkt. No. 434-3 (Dostal Decl.) at  
14 ¶¶ 14, 21, 25; Dkt. No. 400-7 (Felt Dep.) at 164:19–23. The Court has already  
15 found HVI liable for this spill under Sections 311 and 301 of the CWA, 33 U.S.C.  
16 §§ 1321(b) and 1311(a). Dkt. No. 307 at 38:1–5 (Partial Summary Judgment  
17 Order). As set forth below, HVI discharged 4,118 barrels of oil (2,118 barrels of  
18 crude oil and an additional 2,000 barrels of fluid from the containment area)  
19 during the spill from the Bell Facility on December 7, 2007.

20       c. ***January 5, 2008 Zaca Facility, Davis Tank Battery (“1/5/08***  
21 ***Davis Spill”)***: On January 5, 2008, HVI again discharged crude oil and produced  
22 water from Waste Water Tank #2 at the Zaca Facility’s Davis Tank Battery.  
23 Answer ¶ 23. Oil from the spill reached Zaca Tributary. TREX US0295 at  
24 HVI000781 (HVI Failure Analysis); Dkt. No. 434-3 (Dostal Decl.) at ¶¶ 28–32;  
25 Dkt. No. 400-3 (Dean Dep.) at 49:16–20; Dkt. No. 400-15 (Scally Dep. Vol. II) at  
26 371:15–372:6. The Court has already found HVI liable for this spill under  
27 Sections 311 and 301 of the CWA, 33 U.S.C. §§ 1321(b) and 1311(a). Dkt. No.  
28 307 at 38:1-5 (Partial Summary Judgment Order). As set forth below, HVI



1 discharged 3,252 barrels of oil (618 barrels of crude oil and 2,634 barrels of  
2 produced water) during the spill from the Davis Tank Battery on January 5, 2008.

3 **III. THE TWELVE OIL SPILLS WERE THE RESULT OF**  
4 **HVI'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT**

5 *In any case in which a violation of [Section 311(b)(3) of the CWA, 33*  
6 *U.S.C. § 1321(b)(3)] was the result of gross negligence or willful*  
7 *misconduct ... the [violator] shall be subject to a civil penalty of not*  
8 *less than \$100,000, and not more than \$3,000 per barrel of oil ...*  
9 *discharged.*

10 33 U.S.C. § 1321(b)(7)(D).

11 14. Nine of the spills resulted from pipeline failures, and three spills  
12 resulted from tank and pond failures.

13 15. Based on the totality of the circumstances, the spills evinced a pattern  
14 of reckless disregard for good oilfield industry practices and a series of negligent  
15 acts or omissions by HVI concerning oil spill prevention and pipeline and facility  
16 inspection and maintenance.

17 16. This pattern of reckless disregard and extreme departure from the care  
18 required under the circumstances is reinforced by HVI's failure to comply with  
19 Spill Prevention, Control and Countermeasure ("SPCC") and Facility Response  
20 Plan ("FRP") regulations for years after compliance deficiencies had been brought  
21 to HVI's attention. Had HVI complied with these regulations, it likely would have  
22 prevented the oil spills or mitigated their impacts and the volumes discharged.

23 17. Compliance with the SPCC and FRP regulations often requires an  
24 exercise of judgment about good oilfield industry practices or good engineering  
25 practices in order to meet the underlying substantive requirements of the  
26 regulations. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 7-9; Dkt. No. 345-11 (Trial  
27 Declaration of Michael L. Kinworthy, herein after "Kinworthy Decl.") at ¶ 5 n.2.  
28

1           18. Michael L. Kinworthy, an expert witness appearing on behalf of the  
2 United States, has 38 years of experience in the environmental compliance  
3 industry, including directly relevant experience working with oil production  
4 companies, developing oil spill prevention and response programs, and advising  
5 companies on compliance with federal, state, and local environmental requirements  
6 (including SPCC and FRP regulations). Dkt. No. 345-11 (Kinworthy Decl.) at ¶¶  
7 8-13 and Ex. A (Rpt.) at App. A (curriculum vitae).

8           19. Mr. Kinworthy's opinions are based on his extensive professional  
9 experience and environmental compliance expertise, review and assessment of  
10 HVI's spill prevention programs, visits to HVI facilities, review and assessment of  
11 relevant documents (including those pertaining to the causes and contributing  
12 factors of the alleged spills and violations), comparison of HVI's conduct and spill  
13 prevention programs with the requirements in relevant federal and state laws and  
14 with good oilfield industry practices, research and interviews, and deposition  
15 testimony. Id. at ¶ 15.

16           20. Mr. Kinworthy's opinion that HVI, unlike a prudent operator,  
17 disregarded or delayed correcting known issues with spill prevention, pipeline  
18 inspection, facility maintenance, spill response, and environmental compliance is  
19 credible. Id. at ¶ 23.

20           21. HVI offers no expert witness to rebut Mr. Kinworthy's opinions.

21           22. The testimony of HVI's fact witnesses does not credibly rebut Mr.  
22 Kinworthy's opinions as to good oilfield industry practices that a prudent operator  
23 would employ to prevent oil spills, respond to oil spills, and maintain  
24 environmental compliance, as to the causes and contributing factors of the alleged  
25 spills and violations, and as to HVI's failure to adequately and timely correct  
26 known issues with spill prevention, spill response, and environmental compliance,  
27 or identify such issues in the first place.  
28

1           23. The testimony of HVI's fact witnesses likewise does not credibly  
2 rebut the testimony of the United States' and the State's fact witnesses, HVI's  
3 admissions, nor documentary evidence as to the causes and contributing factors of  
4 the alleged spills and violations, and as to HVI's failure to adequately and timely  
5 correct known issues with spill prevention, spill response, and environmental  
6 compliance, or identify such issues in the first place.

7           24. Given HVI's continually ineffectual compliance efforts during the  
8 period of the 12 spills, testimony by HVI's fact witnesses regarding good faith or  
9 good intentions to comply with environmental obligations is not credible and do  
10 not lessen HVI's culpability as a company. Even if these witnesses were  
11 individually credited, any good faith or good intentions on the part of some  
12 individuals does not excuse or lessen HVI's corporate obligation to comply in fact,  
13 and does not suffice as good oilfield industry practice—especially when spills  
14 continued to occur, often for similar and preventable reasons within HVI's control.

15           25. Overall, the overlapping and recurring factors and failures that caused  
16 or contributed to the spills and violations demonstrate HVI's systemic failure to  
17 operate its facilities like a prudent operator of an oil production company would.  
18 Many of the failures, viewed in isolation, represented an extreme departure from  
19 good oilfield industry practices, and in many instances, multiple failures  
20 compounded one another. Viewed in combination, the failures amounted to  
21 reckless disregard for HVI's obligations under the law to prevent and mitigate the  
22 spills and to implement effective spill prevention measures.

23           26. If not for HVI's reckless disregard for and extreme departure from  
24 good oilfield industry practices, the 12 spills could have been prevented or at least  
25 substantially reduced in size and impact.

26           27. If not for HVI's reckless disregard for and extreme departure from  
27 good oilfield industry practices, the violations of SPCC and FRP regulations would  
28 not have occurred or would not have recurred across facilities and continued for

multiple years, particularly after EPA provided HVI clear notice and ample opportunities to correct them. In addition, the violations of SPCC and FRP regulations would not have contributed to the spills.

**A. Recurring Failures to Correct Known Deficiencies**

28. Prudent operations requires correcting deficiencies in spill prevention, spill response, and environmental compliance programs when they become known. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 19-25 (detailing recurring failures to correct SPCC regulatory deficiencies and providing examples observed in 2014 of continuing failures).

29. EPA conducted at least 16 inspections at the 11 Facilities between January 2005 and March 2008. Dkt. No. 345-2 (Reich Decl.) at page 40 (table listing 13 inspections from 2005 to 2016), Dkt. No. 345-1 (Calhoon Decl.) at page 9 (table listing 5 inspections from 2006 to 2007). SPCC violations first identified to HVI by EPA in 2005, including but not limited to inadequate secondary containment, containers that were incompatible with the material stored, and failure to develop and implement a flowline maintenance program, were repeatedly identified during subsequent inspections in 2006, 2007, and 2008 and at multiple facilities. Consistent with their usual practice, EPA inspectors closed out each inspection by discussing the violations with HVI representatives. See, e.g., Dkt. No. 345-2 (Reich Decl.) at ¶ 14; Dkt. No. 345-1 (Calhoon Decl.) at ¶ 11. EPA also informed HVI in writing of the violations in at least 2005, 2006, and 2007. TREX US2500 (4/6/05 Notice of Non-Compliance), TREX US2494 (12/11/06 Notice of Violation), TREX US2512 (5/29/07 Notice of Violation).

30. EPA inspector Peter Reich returned to inspect the Bell and Zaca facilities in February 2016—approximately his third inspection of Bell since 2005, his second of Zaca since 2008, and overall his twelfth or thirteenth inspection of the 11 Facilities. He identified continued noncompliance with flowline

1 maintenance requirements and secondary containment that he had identified in  
2 earlier inspections. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 71 (Bell) and 78 (Zaca).

3 31. Despite knowing about the many deficiencies outlined below in this  
4 section (e.g., deficiencies in secondary containment and diversionary structures,  
5 the development and implementation of a flowline maintenance program, the  
6 quality of its spill response efforts, the attentiveness and promptness of its  
7 employees in correcting problems), HVI allowed them to continue.

8 32. As a result, the deficiencies that caused or contributed to a spill  
9 oftentimes caused or contributed to a subsequent spill because the deficiencies  
10 were not properly addressed. Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 24 & n. 30  
11 (overlapping and recurring factors and failures caused or contributed to spills).

12 33. A prime example of HVI's recurring failures to correct known  
13 deficiencies is HVI's failure, since it acquired the facilities, to develop a flowline  
14 maintenance program to prevent spills from flowlines. Beginning in April 2005,  
15 EPA repeatedly identified flowline maintenance as an issue at HVI's facilities, and  
16 between June of 2005 and December of 2010, HVI had at least nine spills to waters  
17 of the United States from its pipelines. TREX US2500 (4/6/05 Notice of Non-  
18 Compliance) at EPA9\_0195306 ("To prevent further oil releases, Greka Energy  
19 Resources must develop and implement a consistent and aggressive flowline  
20 assessment and maintenance program."). Another example is HVI's failure to  
21 ensure adequate containment structures to capture spills. EPA first notified HVI of  
22 deficiencies with its containment and diversionary structures in April 2005, before  
23 HVI had three major spills that entered waters of the United States as a result of  
24 failed containment. *Id.* at EPA9\_0195304 (describing deficiencies and citing to  
25 SPCC regulations).

26 34. Despite HVI telling the government for years that it would develop a  
27 flowline maintenance program, it did not attempt to develop one until 2010. Dkt.  
28

1 No. \_\_\_\_ at 55:3-13 (10/23/18 Trial Tr. Vol. II, Test. of Kinworthy)<sup>1</sup> (“As an  
2 example in 2002, Susan Whalen, legal counsel for Greka, told the State Attorney  
3 General for the Fish and Game that they were gonna develop a flowline program  
4 right away. You look at various testimonies from Greka employees. They keep  
5 saying they’re going to do it. They keep saying they’re gonna do it. You have it  
6 from 2005. You have it from 2006 to 2007 and it’s really not developed until  
7 2010.”). HVI’s flowline maintenance program remains incomplete and inadequate  
8 today, and has not been fully implemented. See infra ¶ V.A.167.c.

9 35. HVI experienced numerous spills in the years leading up to and  
10 during the period when the 12 spills in this case occurred (2005-2010). From 1999  
11 to 2007, there were 400 releases reported to the Santa Barbara County Fire  
12 Department. TREX HVI0013 at 15 (“Greka Energy Compliance History by  
13 Agency – 400 releases since 1999”). Based on spills from 2003 to 2007, HVI was  
14 “responsible for the largest segment of oilfield releases in [Santa Barbara] County.  
15 In fact, they [were] responsible for more oilfield releases than all of the other  
16 companies combined.” Id. at 6. Based on the number of spill reports (minus report  
17 updates) to the California Office of Emergency Services (OES), HVI experienced  
18 49 spills in 2006, 34 in 2007, 27 in 2008, 17 in 2009, and 16 in 2010. TREX  
19 US3241. (In total, from 2006 through the present, 181 spills have been reported to  
20 OES. Id.)

21 36. Illustrating HVI’s chronic pattern of foreseeable spills, in a 2010  
22 email from Harlan Felt to Alex Dimitrijevic titled “Spills - where and why,” Mr.  
23 Felt evaluated HVI spills from 2004 to 2010 and summarized, “We see the largest  
24 number of spills result from flowline leaks. Level alarm failures are the next  
25 largest cause.” TREX US1181. These spills totaled 153 and occurred across  
26

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27 <sup>1</sup> The parties have received the October 23, 2008, Vol. II trial transcript, but no  
28 docket entry appears to have been created for this transcript. A copy of that  
transcript is attached hereto as Attachment A.



multiple facilities. Id. (see “Incident Count” chart). Mr. Felt’s attached chart “Spills by Root Cause (bbl, 2004 Thru Present)” broke the spills down (in terms of “bbl” or barrels of oil spilled) as 40% caused by flowline leak, 25% caused by tank level alarm failure, and 24% caused by general equipment failure. Id. In another attached chart “Facility Spill Score,” Bell was scored “very poor” and Zaca “poor” in terms of gross barrels produced per barrel spilled. Id.

37. HVI’s history of spills provided clear notice to HVI of systemic and recurring deficiencies in its spill prevention measures. Yet HVI failed to correct its deficiencies or to prevent them in the first place.

38. If not for HVI’s reckless disregard for the need to correct known deficiencies in spill prevention, spill response, and environmental compliance programs, factors and failures that caused or contributed to the spills would have been corrected when they first came to HVI’s attention and would not have caused subsequent spills.

#### **B. Pipeline (Flowline) Maintenance and Inspection**

39. Prudent operation requires a flowline maintenance program. Dkt. No. \_\_\_\_ at 48:20–49:4 (10/23/18 Trial Tr. Vol. II, Test. of Kinworthy) (elements of flowline maintenance program “have been around forever”).

40. Prudent operation requires identifying and mapping the location of all flowlines. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 28–30.

41. Prudent operation requires routine visual inspection of all aboveground flowlines to identify leak indicators and potential compromises in the physical integrity of flowlines, such as corrosion, pitting, and dead spots. Id. at Ex. A (Rpt.) at 33.

42. Prudent operation requires routine mechanical integrity testing of all flowlines to test their physical integrity. Id. at Ex. A (Rpt.) at 34–35.

43. As described in Paragraphs 149–159 infra, until August 2010, HVI had not developed or implemented a flowline maintenance program for the 11

1 Facilities. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 30–31 (SPCC  
2 inspections beginning in 2005 cited absence of adequate program; no program at  
3 all until August 2010 Pipeline Integrity Management Plan). HVI’s program  
4 remains incomplete, inadequate, and not fully implemented. See infra ¶ V.A.167.c.

5 44. HVI was aware of the need to develop and implement a flowline  
6 maintenance program as early as 2002, informing the State that it was “currently  
7 working on a pipeline management plan.” TREX US2760 at HVI011201 (4/5/02  
8 letter from Greka VP Susan Whalen to California Department of Fish and Game).  
9 HVI was also aware of the specific need for a flowline maintenance program at the  
10 Bell Facility (and others) no later than April 2005. Following inspections of HVI  
11 facilities in January 2005, EPA notified HVI that it lacked a flowline maintenance  
12 program at the Bell, U-Cal, and Los Flores Facilities. TREX US2500 at  
13 EPA9\_0195306 (4/6/2005 NOV).

14 45. But despite HVI’s knowledge, HVI still did not have a flowline  
15 maintenance program for the Bell Facility or any of its facilities in the Santa Maria  
16 Valley. In 2007, HVI stated to EPA that it was still working to develop a flowline  
17 maintenance program. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 31  
18 (describing correspondence from HVI managers Bob Allen and Alvin  
19 Wedderburn). In 2008, HVI employees acknowledged the need to map pipelines  
20 and create a pipeline integrity management plan for each lease—and that HVI had  
21 yet to do so: “We’ve known we’d someday have to map all the pipelines over all  
22 the leases and create a pipeline integrity management plan (PIM) for each lease.”  
23 TREX US2042 (2008 email thread among HVI engineer Harlan Felt and others).

24 46. HVI’s SPCC Plans for the Bell Facility, where all nine of the pipeline  
25 spills at issue in this case occurred, confirm that, at a minimum, there was no  
26 “regular program of flowline maintenance” at the Bell Facility from 2004 through  
27 the end of 2007. TREX US2943 at HVI024618 (2007 SPCC Plan); TREX US2992  
28 at HVI001139 (2004 SPCC Plan).



1           47. HVI employees confirmed that there was no flowline maintenance  
2 plan at the Bell or Zaca Facilities before 2010. Dkt. No. 400-11 (Muñoz Dep.  
3 Vol. I) at 205:12–206:4 (plan not in existence when he was an operator of Bell  
4 (around 2002/2003 through 2005/2006)); Dkt. No. 400-13 (Proskow Dep.) at  
5 153:4–25 (no plan when he was an operator/foreman at Zaca from 2007 through  
6 2009/2010).

7           48. HVI did not have maps for the Bell Facility (its largest facility)  
8 showing all pipelines at the facility or distinguishing between active and inactive  
9 pipelines. TREX US2042 (2008 email from Harlan Felt to HVI employees about  
10 how to map Bell lines and noting, “No such thing as a PIM [pipeline integrity  
11 management plan] without knowing what lines we have and where they are”).

12           49. Although some pipelines were included in inspections of the Bell  
13 Facility by HVI personnel, their inspection practices were not conducted in a  
14 manner that could reasonably be expected to detect corrosion or other conditions  
15 that could lead to a discharge. For example, HVI’s pipeline inspections were  
16 primarily conducted from vehicles during routine facility travel, making it  
17 extremely difficult to identify corrosion. In addition, because a significant  
18 percentage of Greka’s pipelines are either partially buried or in direct contact with  
19 the ground, it is impossible to visually inspect the entire circumference of many of  
20 HVI’s pipelines. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 33–34.  
21 Pipeline inspections, whether daily or weekly, by employees in the field were “just  
22 to check out the lines when you’re going by to no end other than just to catch a  
23 leak in case one happens.” Dkt. No. 400-13 (Proskow Dep.) at 154:1–12. As a  
24 result, HVI failed to inspect its pipelines in a way that would effectively identify  
25 problems with pipelines *before* spills occurred. Dkt. No. 345-2 (Reich Decl.) at  
26 ¶¶ 85-86.

27           50. From 2003 to 2010, HVI hydrostatically tested sections of pipeline  
28 only when a new section of pipeline was installed. Dkt. No. 400-11 (Muñoz Dep.

1 Vol. I) at 211:12–212:9. HVI otherwise did not regularly perform mechanical  
2 integrity tests on the pipelines at the Bell Facility. Id. at 212:16–20. HVI only  
3 began systematically pressure-testing active flowlines in 2010 and 2011. See, e.g.,  
4 Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 39 (Bell item #3: first test  
5 performed in 2010) and 42–43 (Davis item #3: first test performed in 2011).

6 51. Seven of the 12 spills resulted from corrosion of flowlines or valves.  
7 At the time of most of those spills, HVI was not using chemical corrosion  
8 inhibitors to prevent or minimize internal corrosion. HVI did not implement  
9 chemical corrosion inhibitors until 2009. Dkt. No. 345-11 (Kinworthy Decl.) at  
10 ¶ 23(a) & n.6 and 7 (HVI stopped practice by prior operators Saba and Unocal of  
11 using corrosion inhibitors).

12 52. For the 7/16/07 Bell spill, at a minimum, HVI was not using any  
13 corrosion controls at all to prevent or minimize internal or external corrosion. Dkt.  
14 No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 13-14 (flowline that failed in  
15 7/16/07 Bell Spill lacked cathodic protection, corrosion inhibitors, or pipe wrap).  
16 The spill resulted from a combination of corrosion and abrasion in the below-  
17 ground portion of a flowline, which was partially buried such that the bottom half  
18 was covered, in constant contact with soil, and not visible for inspection. Id.

19 53. At least seven of the nine pipeline spills at the Bell Facility were  
20 caused by corroded pipelines that went undetected by HVI personnel: the 6/8/05  
21 Bell Spill (TREX US1232 at EPA9\_0009426), 7/13/05 Bell Spill (TREX US1252  
22 EPA9\_0009428), 8/11/05 Bell Spill (TREX US1498 at EPA9\_0009437), 7/16/07  
23 Bell Spill (TREX US1372 at EPA9\_0268877 ln. 25-29), 1/29/08 Bell Spill (TREX  
24 US0012 at EPA9\_0268803 ln. 7-14), 5/1/09 Bell Spill (TREX US1190), and  
25 10/14/10 Bell Spill (TREX US0590 at EPA9\_0032517). To illustrate, a former  
26 Bell operator discussing the 7/16/07 Bell Spill from a partially buried pipeline  
27 confirmed that he had no ability to determine the condition of the buried portion in  
28

1 inspections. Dkt. No. 400-11 (Muñoz Dep. Vol. I) at 238:4-17 (stating that he “just  
2 basically went off basically how the rest of the pipeline probably looked”).

3 54. If not for HVI’s reckless disregard for the need to develop and  
4 implement effective flowline maintenance programs, the 6/8/05, 7/13/05, 8/11/05,  
5 7/16/07, 1/29/08, 5/1/09, and 10/4/10 Bell Spills—each caused by corrosion—  
6 would not have occurred. Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 23(a).

7 **C. Equipment Failure/Improper Use of Equipment**

8 55. Prudent operation requires using equipment (including tanks and  
9 flowlines) properly and as intended. Prudent operation also requires preventative  
10 maintenance and prompt repair of equipment, which is critical to minimizing the  
11 possibility of equipment failures and, in turn, minimizing the possibility of oil  
12 spills. Dkt. No. 345-11 (Kinworthy Decl.) at ¶¶ 20, 23(f). EPA informed HVI of  
13 some of these equipment problems. See, e.g., TREX 2500 at EPA9\_0195305-306  
14 (4/05 NOV describing “severely corroded” oil-containing tank with “partially  
15 collapsed roof” representing a potential source of oil spill and informing HVI that,  
16 “[w]here flowline integrity is inadequate, replacement of the flowline is  
17 recommended”).

18 56. If not for HVI’s reckless disregard for preventative maintenance and  
19 prompt repair of equipment, HVI would have adequately inspected for equipment  
20 deterioration and proactively repaired or replaced equipment in old or poor  
21 condition, thus preventing many of the spills. Dkt. No. 345-11 (Kinworthy Decl.)  
22 at ¶ 21(a) and Ex. A (Rpt.) at 10–11 (improper use of equipment as factor in 1/5/08  
23 Davis Spill and slow repair or replacement of produced-water tank as factor in  
24 12/7/05 Davis Spill), 13–15 (substandard corrosion prevention in pipelines and  
25 valve as factors in 7/16/07 Bell Spill and 1/29/08 Bell Spill).

26 57. At the time of the 12/7/05 Davis Spill, only one of the two waste  
27 water storage tanks at the Davis Tank Battery was in service. Had the second tank  
28 been in operation, it would have provided additional storage capacity, and fluids

1 from wastewater tank #2 would have flowed into the second tank rather than  
2 overflowing wastewater tank #2. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A  
3 (Rpt.) at 11 (tank 1 had been out of service and removed approximately 2–3  
4 months earlier, indicating Davis was operating at only half-capacity for storing  
5 produced water).

6 58. As shown in the 12/7/07 Bell Spill, HVI failed to properly protect its  
7 equipment from the elements, increasing the likelihood of equipment failure. The  
8 spill resulted when one of the internal combustion engines for the injection pumps  
9 at the Bell Facility’s Blochman Ponds failed, causing an overflow of the ponds that  
10 escaped secondary containment. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A  
11 (Rpt.) at 17. The failure resulted from rainwater coming into contact with the pump  
12 motor’s spark plugs. TREX US0969 at EPA9\_0268701 ln. 36–44 (State  
13 investigation report).

14 59. As in the 12/7/05 Davis Spill, HVI was again operating the Davis tank  
15 battery with only one wastewater tank, due to the other being out of service, at the  
16 time of the 1/5/08 Davis Spill. TREX US0195 at EPA9\_0269233 ln. 155-157. In  
17 addition, the failed pump motor that was the primary cause of the 1/5/08 Davis  
18 Spill was designed for “indoor use only,” but HVI was using it outdoors,  
19 uncovered and exposed to the elements. As a result, rain short-circuited the motor,  
20 which in turn caused a pump to stop working and resulted in the overfilling and  
21 rupture of a tank. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 10–11. In  
22 addition, the tank that was taken out of service had failed in August 2007 still had  
23 not been repaired or replaced by 1/5/08, leaving the facility to operate with only  
24 half of its original storage capacity for produced water. If HVI had had both tanks  
25 in operation, it is very likely that the 1/5/08 Davis Spill would not have occurred.  
26 Id. at Ex. A (Rpt.) at 11.  
27  
28

1           60. If not for HVI's reckless disregard for proper use and maintenance of  
2 equipment, the 12/7/05 Davis Spill, 12/7/07 Bell Spill, and the 1/5/08 Davis Spill  
3 would not have occurred.  
4

5  
6           **D. Inadequate Monitoring for Spills**

7           61. Prudent operation requires adequately monitoring for actual and  
8 potential spills, which allows a company to stop the spill or, if detected early  
9 enough, prevent the spill. Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 23(b) and Ex. A  
10 (Rpt.) at 6, 16-17.

11           62. HVI failed to repair alarms that monitored for high fluid levels or, as  
12 an alternative, maintain 24-hour coverage of facilities (through surveillance or  
13 manning of a facility). *Id.* HVI seemingly recognized the need for a policy of 24-  
14 hour coverage to prevent spills and reportedly instituted it following the 12/7/05  
15 Davis Spill. TREX US0846 at HVI010576 (Davis Tank Battery operations  
16 procedures providing for 24/7 coverage purporting to be effective starting  
17 December 23, 2005). It purported to institute it again after the 1/5/08 Davis Spill.  
18 TREX US0209 at HVI067094 (corrective action of 24-hour manned coverage after  
19 1/5/08 Davis Spill). Yet it did not abide by this policy. During the 12/7/07 Bell  
20 Spill, 1/5/08 Davis Spill, and 1/29/08 Bell Spill, the facilities were not manned,  
21 contributing to or causing the spills.

22           63. If not for HVI's reckless disregard for spill monitoring, HVI would  
23 have promptly repaired or replaced alarms, periodically tested alarms, not allowed  
24 employees to become complacent about broken or repeated alarms, and ensured  
25 that facilities were manned 24 hours a day during periods of alarm inoperability.  
26 Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 23(b).

27           64. If not for HVI's reckless disregard for spill monitoring, the 12/7/05  
28 Davis Spill and 12/7/07 Bell Spill would not have occurred and the 7/16/07 Bell

1 Spill and 1/5/08 Davis Spill would likely have been promptly discovered, allowing  
2 HVI to respond to the spills sooner.

3 65. For example, in the weeks leading up to the 12/7/05 Davis Spill, HVI  
4 knew that the high-level alarm in the tank that spilled had been broken. Yet HVI  
5 had not repaired the alarm nor provided 24-hour manned coverage at the Zaca  
6 Facility. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 6-7 (HVI aware of  
7 broken alarm sensor for weeks prior but never attempted to correct the problem nor  
8 manned the facility for 24 hours/day despite operating 24 hours/day). Instead of  
9 being promptly detected by an HVI employee, the spill was only discovered by a  
10 Santa Barbara County employee on the morning of December 7, 2005. TREX  
11 US0870 at HVI0010763 (State investigation report).

12 66. As another example, the 7/16/2007 Bell Spill emanated from a  
13 below-ground, buried portion of the flowline that was not visible from the road or  
14 work areas of the Bell Facility and was only detected by chance by a  
15 ConocoPhillips contractor working nearby who saw oil in the creek. Dkt. No. 345-  
16 5 (Esparza Decl.) at ¶¶ 4-8 (was not drawn to the oil in the creek by anything he  
17 could see while driving on Palmer Road or by any strong odors); TREX US1416 at  
18 HVI045486 (HVI response to EPA that spill was not visible from work areas on  
19 the lease). HVI only inspected Palmer Road Creek for spills approximately once  
20 per year and only inspected the visible portion of the partially buried flowline a  
21 couple of times per year. Dkt. No. 400-11 (Muñoz Dep. Vol I) at 247:6-19. And  
22 the flowline lacked any alarm to indicate if and when a leak was occurring. *Id.* at  
23 242:16-20. It is therefore unsurprising that HVI failed to detect the flowline leak.

24 67. As another example, in the weeks leading up to the 12/07/07 Bell  
25 Spill, HVI knew that the high-level alarm for the Bell Facility's Blochman Ponds  
26 was not functioning properly. In the fifteen days leading up to the 12/7/07 Spill,  
27 the high-level alarm for the Blochman Ponds was triggered more than 100 times  
28 due to high fluid levels in the Ponds. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A



1 (Rpt.) at 16-17. This complacency with the alarms was despite HVI knowing that  
2 “[t]he injection pond system [had] been problematic for years in regard to levels  
3 and containment.” TREX US0024 at HVI045709.

4 68. Despite knowing that the Blochman Ponds were often close to  
5 overflowing and that the alarms were not functioning reliably, HVI did not  
6 maintain 24-hour manned coverage of the Bell Facility. Instead, HVI manned the  
7 Bell Facility for only eight hours per day, Muñoz Dep Vol. II at 432:2–22, with an  
8 employee last monitoring the Ponds’ fluid levels around 6:30 pm on December 6,  
9 2007, TREX US0969 at EPA9\_0268701 (State investigation report). When a  
10 broken pump caused fluid levels in the Blochman Ponds to rise uncontrollably and  
11 overflow—sometime between 6:30 pm on December 6, 2007, and 7:30 am on  
12 December 7, 2007—two separate alarms failed to trigger. TREX US1021 at  
13 HVI000412.

14 69. As another example, the 1/5/08 Davis Spill began when crude oil and  
15 oily waste water overfilled a tank while the facility was unmanned. Dkt. No.  
16 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 7. An operator was last at the facility  
17 at about 3:00 pm on January 4, 2008. TREX US0215 at HVI000789 (time line by  
18 HVI foreman Scott Proskow). At 6:40 pm that evening, the high-level alarm on the  
19 tank activated because of rising fluid levels. Id. The spill was only discovered the  
20 next morning by a local vineyard worker who notified HVI at about 6:40 a.m. that  
21 oil was coming out of the tank. TREX US0183. In a report submitted to EPA by Al  
22 Wedderburn, HVI’s Environmental Manager, HVI said that “the release occurred  
23 in the early morning while our facilities were unmanned. Our reliance on alarms  
24 was the primary contributing factor in the release and the policy to leave our  
25 facilities unmanned at night was a secondary contributory factor in the spill in that  
26 a night operator would have probably seen the visual alarm and could have  
27 intervened in time to shut in the wells that were sending production to the injection  
28

1 tank.” HVI’s report described the appropriate corrective action as implementing  
2 24-hour security or operators. TREX US0209 at HVI067094.

3 **E. *Secondary Containment and Diversionary Structures***

4 70. Secondary containment or diversionary structures prevent a spill from  
5 a primary container, such as a tank, from leaving an area and impacting the  
6 environment. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 7.

7 71. Prudent operation requires that a company inspect and maintain  
8 secondary containment and that secondary containment have sufficient capacity to  
9 hold the largest single container with sufficient freeboard to contain precipitation  
10 so that spills cannot escape beyond secondary containment and potentially impair  
11 the environment. Id.; TREX US0873 at EPA9\_0008522 (2005 Zaca SPCC  
12 inspection report noting need for secondary containment with capacity for entire  
13 contents of the largest single tank under SPCC regulations); see infra ¶¶ V.A.178–  
14 V.A.189 and evidence cited therein on HVI’s failures to have adequate secondary  
15 containment and diversionary structures.

16 72. HVI repeatedly failed to notice and repair holes (such as wildlife  
17 burrows) and other structural deficiencies (such as missing cinder blocks and drain  
18 pipes lacking closure valves) in secondary containment at its facilities. Dkt. No.  
19 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 7-8, 17.

20 73. If not for HVI’s reckless disregard for inspection and maintenance of  
21 secondary containment, HVI would have adequately inspected secondary  
22 containment for any structural compromise or weakness, promptly repaired  
23 wildlife burrows and other compromises in secondary containment, installed  
24 necessary valves on pipes, and ensured that secondary containment had sufficient  
25 capacity to hold the largest single container with sufficient freeboard to contain  
26 precipitation. Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 23(c).

27 74. If not for HVI’s reckless disregard for inspection and maintenance of  
28 secondary containment, the 12/7/05 Davis Spill, the 12/07/07 Bell Spill, and the



1 1/5/08 Bell Spill would have been effectively contained within secondary  
2 containment and would not have reached waters of the United States. Id.

3 75. For example, in the 12/7/05 Davis Spill, after wastewater tank #2  
4 overfilled and oil and produced water spilled from the tank, HVI's containment  
5 berms failed to contain the spilled fluids, and the oil and produced water escaped  
6 through an unrepaired rodent burrow or burrows. Id. at Ex. A (Rpt.) at 7-8  
7 (repaired burrows would have prevented spill or at least a major portion of spill  
8 volume from leaving tank farm).

9 76. As another example, in the 12/07/2007 Bell Spill, the walls of the  
10 Blochman Ponds, which served as the primary containment for the crude oil and  
11 wastewater at the Bell injection facility, had two six-inch holes in them,  
12 approximately one foot below the top of the wall. Dkt. No. 345-11 (Kinworthy  
13 Decl.) at Ex. A (Rpt.) at 17. On 12/7/07, crude oil and wastewater discharged from  
14 the Ponds through the holes in the side of the Ponds' walls, TREX US0969 at  
15 EPA9\_0268705 (State investigation report), and escaped through a compromised  
16 earthen berm on their way into Palmer Road Creek, TREX US1182 at  
17 HVI000538-539 (HVI 308 Response stating that spill "found a weak spot" in  
18 secondary containment berm). Unrestored grading that had been done for a prior  
19 spill response might have further enabled the spill to migrate offsite. TREX  
20 US0969 at EPA9\_0268704-705 (State investigation report).

21 77. As another example, in the 1/5/08 Davis Spill, crude oil and oily  
22 waste water escaped secondary containment at the Zaca Facility's Davis Tank  
23 Battery through a drainage pipe and through holes in the berms and flowed into the  
24 nearby Zaca Tributary. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 8.  
25 The collapse of portions of berm because of spill also demonstrated that the berm  
26 lacked integrity to hold a release. Dkt. No. 345-2 (Reich Decl.) at ¶ 38. The  
27 drainage pipe was known to HVI at least since October 22, 2006 (more than a year  
28 earlier), when a spill had similarly escaped through the same pipe. TREX US2648

1 at EPA9\_0203785 and -787 (Oct. 2006 spill reports by HVI). Yet HVI failed to  
2 take necessary and reasonable steps to prevent a recurrence. It neither removed the  
3 pipe nor added a closure valve, enabling the 1/5/08 Davis Spill. Dkt. No. 345-11  
4 (Kinworthy Decl.) at Ex. A (Rpt.) at 8.

5 78. HVI claimed that the 1/5/08 Davis Spill was the result of vandalism or  
6 sabotage. Dkt. No. \_\_\_\_ (10/23/18 Trial Tr. Vol. II, Test. of Reichick) at 77:8–15.  
7 However, after an investigation, Santa Barbara County Sheriff’s Department  
8 detective Adam Reichick “found insufficient evidence to believe that this was an  
9 intentional act conducted by anybody.” Id. at 80:7–11. Thus, the claims by HVI of  
10 vandalism or sabotage as the cause are unproven, not supported by any expert  
11 testimony, and not credible. Dkt. No. 434-3 (Dostal Decl.) at ¶ 35 (explaining  
12 sabotage was not cause of 1/5/08 Davis Spill based on investigation of October  
13 2006 spill that flowed through same unchecked pipe and describing photos at  
14 TREX US0550); TREX US0550 at DFG026226-227 (Dostal photos of Oct. 2006  
15 spill).

16 **F. SPCC Plans**

17 79. SPCC Plans are designed to ensure that a company has proper  
18 measures in place to prevent or minimize oil spills and, in the event of a spill, to  
19 properly respond to minimize the impact to waters of the United States. Prudent  
20 operation requires maintaining, reviewing, and updating SPCC Plans to meet the  
21 requirements of the SPCC regulations, and implementing those SPCC Plans to  
22 prevent or minimize oil spills. Dkt. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 11.

23 80. Prudent operation requires prompt correction of deficiencies in SPCC  
24 Plans and review (and correction as needed) of other SPCC Plans for similar  
25 deficiencies. Dkt. No. \_\_\_\_ at 55:24–56:4 (10/23/18 Trial Tr. Vol. II, Test. of  
26 Kinworthy) (“[O]nce I got that first SPCC inspection and they find out all these  
27 issues, why would you not go to all your other facilities and update those plans,  
28

1 too? Instead, they waited until the EPA inspectors got there so they were always  
2 reactionary and not proactive at all.”).

3 81. HVI knew that the SPCC Plans for certain facilities did not comply  
4 with SPCC regulations because as early as January 2005, EPA informed HVI about  
5 such deficiencies after each inspection. Per usual practice, EPA inspectors would  
6 discuss such deficiencies with HVI representatives at the close of each inspection.  
7 See, e.g., Dkt. No. 345-2 (Reich Decl.) at ¶ 13(a), 14 (Battles SPCC Plan  
8 deficiency in Jan. 2005 inspection, and closed out inspection by discussing  
9 deficiencies with Greka representatives as is usual practice). EPA also informed  
10 HVI in writing. See, e.g., TREX US2500 at EPA9\_0195305 to -306 (4/6/05 Notice  
11 of Non-Compliance describing SPCC Plan deficiencies for Battles, Bell, and other  
12 facilities recorded in Jan. 2005 inspections). Yet HVI failed to promptly correct the  
13 SPCC Plans’ deficiencies. See ¶¶ V.A.190–V.A.205 infra on HVI’s failures to  
14 have adequate SPCC Plans.

15 82. If not for HVI’s reckless disregard for compliance with SPCC  
16 regulations, HVI would have developed and implemented SPCC Plans that  
17 adequately addressed spill prevention and containment measures that would have  
18 effectively prevented the spills, or prevented the spills from escaping secondary  
19 containment, and the 12/7/05 Davis Spill, the 7/16/07 Bell Spill, the 12/7/07 Bell  
20 Spill, the 1/5/08 Davis Spill, and the 1/29/08 Bell Spill would have been  
21 effectively contained within secondary containment and would not have reached  
22 waters of the United States or, at the least, would have resulted in smaller volumes  
23 of oil reaching waters of the United States.

24 **G. Spill Prevention Training and Procedures**

25 83. Prudent operation requires training employees on proper spill  
26 prevention procedures and ensuring that employees adhere to such procedures.  
27 Dkt. No. 345-11 (Kinworthy Decl.) at ¶ 23(e) and Ex. A (Rpt.) at 35.  
28

1           84. HVI's field operators were not adequately trained on, or did not  
2 adhere to, procedures critical to effective spill prevention. Their field inspections  
3 were inadequate, failing to identify multiple problems with secondary containment  
4 areas, inadequate drainage control measure, oil accumulation, and other problems  
5 that a prudent operator should and would identify and correct. Id. at Ex. A (Rpt.) at  
6 20-24. The 12 spills evinced inadequate training of employees, inadequate  
7 implementation by employees of training, or both. Additionally, as examples from  
8 the 2005-2010 period and examples from Mr. Kinworthy's site visits in 2014 and  
9 2016 show, HVI experienced, and continues to experience, inadequate inspections  
10 for spill prevention, failure to identify problems with secondary containment,  
11 inadequate drainage control measures, unremoved oil accumulation, and other  
12 problems that should have been identified by employees. Id.

13           85. If not for HVI's reckless disregard for employee training on proper  
14 spill prevention, HVI would have identified during field inspections problems that  
15 could cause or worsen spills or impair secondary containment, and the 1/5/08  
16 Davis Spill might have been prevented or mitigated, id. at Ex. A (Rpt.) at 5, 11-12,  
17 and the 12/7/05 Bell Spill, 7/16/07 Bell Spill, 12/7/07 Bell Spill, 12/27/08 Bell  
18 Spill could also have been prevented, Dkt. No. 345-2 (Reich Decl.) at ¶ 88.

19  
20 **IV. THE TWELVE OIL SPILLS RESULTED IN THE DISCHARGE OF**  
21 **APPROXIMATELY 26,584 BARRELS OF OIL (INCLUDING**  
22 **PRODUCED WATER)**

23           86. Based on witness testimony, the opinions of the United States' expert  
24 witnesses, stipulations and self-reported information from HVI, and  
25 contemporaneous documentary evidence such as production data and waste  
26 disposal manifests, the 12 oil spills resulted in the total discharge of  
27 approximately 26,584 barrels of oil (comprised of crude oil and produced water,  
28 which is crude and other constituents mixed with waste):

Date	Facility	Source/Cause	Volume Crude Oil in bbls.	Volume Produced Water in bbls.	Total Volume in bbls.
6/8/2005	Bell	Pipeline failure	1	200	201
7/13/2005	Bell	Pipeline failure	20	50	70
8/11/2005	Bell	Pipeline failure	2	20	22
12/7/2005	Davis	Tank #2 failure	2,135	?	2,135
7/16/2007	Bell	Pipeline failure	294	16,333	16,627
12/7/2007	Bell	Blochman Ponds failure	2,118	2,000 (fluid)	4,118
1/5/2008	Davis	Tank #2 failure	618	2,634	3,252
1/29/2008	Bell	Pipeline failure	126	?	126
12/27/2008	Bell	Pipeline failure	4	?	4
5/1/2009	Bell	Pipeline failure	9	?	9
10/14/2010	Bell	Pipeline failure	10	5	15
12/21/2010	Bell	Pipeline failure	1	4	5
<b>Total</b>			<b>5,338</b>	<b>21,246</b>	<b>26,584</b>

87. For the four largest spills, the United States relied on the expert testimony of C.E. Hackstedt, P.E. to estimate the total volume of oil discharged. Dkt. No. 345-6 (Hackstedt Decl.); Dkt. No. 467 at 7:6-8:9 (10/23/18 Trial Tr. Vol. I, Test. of Hackstedt). Mr. Hackstedt's opinions are consistent with the estimates of the volume of oil recovered during cleanup developed by the United States' second expert Dr. Terrence Johnson, Ph.D., and estimates provided by the State of California Department of Fish and Wildlife ("DFW") and HVI. Dkt. No. 345-7 (Johnson Decl.); Dkt. No. 467 at 47:24-48:23 (10/23/18 Trial Tr. Vol. I, Test. of Johnson). As demonstrated below, these lines of evidence converge on a narrow range of estimates, which are reliable, particularly in contrast to the much less reliable estimates provided by HVI's expert witness Peter Mesard, P.E.

88. When the number of barrels of oil discharged resulting from the four largest oil spills is combined with the number of barrels of oil discharged resulting from the other eight oil spills, the United States estimates that a total of 26,584 barrels of oil were discharged from facilities owned or operated by HVI.

1           89. The Court finds the testimony and estimates provided by Mr.  
2 Hackstead and Mr. Johnson reliable, and further finds that 26,584 barrels of oil  
3 were discharged from facilities owned or operated by HVI during the 12 spills at  
4 issue in this case.

5  
6           **A. Mr. Hackstedt Used Production Data and Correction Factors to**  
7           **Estimate that 26,132 Barrels of Oil, Including Produced Water, Were**  
8           **Discharged as a Result of the Four Largest Spills**

9           90. Mr. Hackstedt is a petroleum engineer with over 40 years of  
10 experience working in oil and gas production. He has a Bachelor of Science in  
11 Petroleum Engineering from Texas A&M University and is a Registered  
12 Professional Engineer in Texas. Dkt. No. 345-6 (Hackstedt Decl.) at ¶ 2 .

13           91. Since 1972, Mr. Hackstedt has worked for seven different oil and gas  
14 production companies with operations in fourteen U.S. states and abroad. His  
15 career in the oil and gas industry has focused on oil production and operations. Id.  
16 at ¶ 2-4.

17           92. In Mr. Hackstedt's experience, he has used, and it is typical in the oil  
18 and gas industry to use, well tests to determine expected oil and water production;  
19 measure fluid volumes in tanks; measure volumes of fluid injected; track fluids  
20 throughout the production process; review and analyze production data; and use  
21 production data, including correction factors, to assess problems in the production  
22 process and to account for fluids produced. Id. at ¶¶ 2-6.

23           93. To develop his conclusions, Mr. Hackstedt reviewed HVI's oil  
24 production records, information regarding oil production equipment and  
25 infrastructure at HVI's facilities, and incident reports related to oil spills at HVI's  
26 facilities. He visited HVI's Zaca and Bell Facilities, applied his expertise in oil  
27 and gas facility production and operation, and performed calculations based on the  
28 information reviewed. Id. at ¶¶ 5-7 and Ex. A (Rpt) at 1.



1           94. For certain of the spills, Mr. Hackstedt was able to identify volumes  
2 of crude oil that had been produced by HVI's wells but were missing from its  
3 inventory or sales data. His inability to account for or track certain volumes of  
4 crude oil throughout HVI's production process led him to conclude that those  
5 missing volumes had been lost during the spill incidents reported by HVI. In  
6 instances where HVI's production and injection data did not allow him to identify  
7 volumes of oil and/or water that were missing from the production process with a  
8 reasonable degree of certainty, he was able to confirm that quantifications of oil  
9 recovered during spill cleanup operations were consistent with the available data.  
10 Id. at ¶¶ 5-7.

11           **B. 12/7/05 Davis Spill Volume**

12           95. On December 7, 2005, HVI reported an oil spill from Waste Water  
13 Tank #2 ("Tank WW2") at the Zaca Facility's Davis Tank Battery (the 12/7/05  
14 Davis Spill). At the time of the 12/7/05 Davis Spill, Tank WW2 overfilled and  
15 ruptured, spilling a significant volume of fluids into the surrounding environment.  
16 Dkt. No. 414 (Curtis Decl.) at ¶¶ 9-16; Dkt. No. 345-14 (Boggs Decl.) at ¶¶20-31;  
17 Dkt. No. 434-3 (Dostal Decl.) at ¶¶ 64-74; Dkt. No. 345-10 (Wise Decl.) at ¶¶ 6-  
18 29.

19           96. A reasonable estimate of the volume of crude oil discharged during  
20 the 12/7/05 Davis Spill can be calculated by identifying missing volumes of crude  
21 oil from HVI's production records. Dkt. No. 345-6 (Hackstedt Decl.) at ¶¶ 15-24  
22 and Ex. A (Rpt.) at 4-22; Dkt. No. 400-6 (Dimitrijevic 30(b)(6) Dep.) at 62:8-24;  
23 65:6-9; TREX US0836<sup>2</sup> at HVI021874-75 (12/05 Monthly Production Report).

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24  
25  
26 <sup>2</sup> This document was cited in Mr. Hackstedt's declaration and admitted by the  
27 Court, Dkt. No. 354-6 (Hackstedt Decl.) at p. 18; Dkt. No. 467 at 7:24-8:8  
28 (10/23/18 Trial Tr. Vol. I), but was omitted from the List of Exhibits and  
Witnesses, Dkt. No. 455.

1           97. Based on HVI's expectation that it would produce 4,305 barrels of oil  
2 in the first 6.75 days of December, and the fact that only 1,434 barrels made it into  
3 HVI's inventory during that period, the volume of missing oil according to HVI's  
4 production records is 2,871 barrels (4,305 – 1,434). Id. at ¶¶ 15-17; TREX  
5 US0836 at HVI021874 (12/05 Monthly Production Report).

6           98. Recognizing, however, that HVI's expected oil production does not  
7 always match its inventory/sales total, Mr. Hackstedt calculated a more  
8 conservative estimate of the missing oil volume relating to the 12/7/05 Davis Spill  
9 by applying the oil correction factors determined by HVI for the Zaca Facility's  
10 Davis and Chamberlin Tank Batteries; Dkt. No. 345-6 (Hackstedt Decl.) at  
11 ¶¶ 19-20.

12           99. Adjusting the expected oil production volume downward using the  
13 Davis and Chamberlin oil correction factors from November, 2005 (the month  
14 ending six days before the spill) results in a volume of missing crude oil of 2,344  
15 barrels. Adjusting the expected oil production volume downward using the  
16 average Davis and Chamberlin oil correction factors from January through  
17 November, 2005, results in a volume of missing crude oil of 1,925 barrels. Dkt.  
18 No. 345-6 (Hackstedt Decl.) at ¶¶ 21-22 and Ex. A (Rpt) at Tables 5-6.

19           100. The Court finds that HVI discharged 2,135 barrels of crude oil from  
20 Tank WW2 (the average between 1,925 and 2,344 barrels of missing crude oil as  
21 calculated by Mr. Hackstedt) during the 12/7/05 Davis Spill.

22           101. Because of the limited data available, Mr. Hackstedt was not able to  
23 calculate the volume of waste water discharged from Tank WW2 during the  
24 12/7/05 Davis Spill. Id. at ¶¶ 25-26.

25           102. Based on the foregoing, HVI discharged 2,135 barrels of oil (2,135  
26 barrels of crude oil and an unknown volume of produced water) during the spill  
27 from the Davis Tank Battery on December 7, 2005.

28           **C. 7/16/07 Bell Spill Volume**



1           103. On July 16, 2007, HVI reported a spill from a buried portion of an  
2 8-inch diameter pipeline at the Bell Facility (the 7/16/07 Bell Spill). The pipeline  
3 leaked and spilled crude oil and produced water into the surrounding environment.  
4 Docket No. 434-3 (Dostal Decl.) at ¶¶ 9–12; Dkt. No. 345-14 (Boggs Decl.) at  
5 ¶ 32; Docket No. 345-10 (Wise Decl.) at ¶ 31.

6           104. The ruptured family line that was discovered on July 16, 2007, at  
7 HVI's Bell Facility transported a mixture of petroleum and petroleum-related  
8 substances that was 1.8% crude oil and 98.2% water, salts, and other chemical  
9 substances from the same underground formation as the crude oil which is  
10 commonly referred to in the oilfield production industry as "produced water."  
11 Dkt. No. 442 at Admitted Fact ¶ 5.tt (Final Pretrial Conf. Order).

12           105. A reasonable estimate of the volume of crude oil and produced water  
13 discharged by Defendant during the 7/16/07 Bell Spill can be calculated relying  
14 on the volume of crude oil recovered during the cleanup and the ratio of crude oil  
15 to produced water that flowed through the pipeline that was the source of the  
16 discharge. Dkt. No. 345-6 (Hackstedt Decl.) at ¶¶ 28-29 and Ex. A (Rpt.) at 34-35.

17           106. HVI personnel and HVI contractors performed the cleanup of the  
18 7/16/07 Bell Spill, and all cleanup activities, including the process for  
19 quantification of recovered materials, were coordinated with the Incident  
20 Command and agreed to. Dkt. No. 345-14 (Boggs Decl.) at ¶¶ 35-50; Dkt. No.  
21 434-4 (Gross Decl.) at ¶ 20; Dkt. No. 434-6 (Connell Decl.) at ¶¶ 21–24; TREX  
22 US1341 at DFG007353-7354 (CDFW Photographic Display Sheet); TREX  
23 US1354 (OSPR Field Report); TREX US1408 at DFG016447–449 (E-mail re:  
24 Work Plan and Waste Profile Plans); TREX US1418 (IAP); TREX US1456  
25 (Scully Witness Statement); TREX US1372 at EPA9\_2248877-879 (Investigation  
26 Report); TREX US3170 (Incident Action Plan).

27           107. HVI's contractor, Cole's Services, determined that the contaminated  
28 solids in the roll-off bins recovered from the creek during the cleanup of the

1 7/16/07 Bell Spill included twenty percent crude oil. HVI's contractor certified the  
2 accuracy of its determination on the waste profile that it submitted to the disposal  
3 facility for approval. HVI certified the accuracy of the waste profile that it  
4 referenced in the waste manifests used to transport the waste. Dkt. No. 345-14  
5 (Boggs Decl.) at ¶ 46; TREX US1270 at DFG001862 (Waste Profile); TREX  
6 US1323 (Waste Profile Sheets); TREX US1408 (E-mail re: Work Plan and Waste  
7 Profile Plans); TREX US1468 at HVI1024070-99 (Waste Manifests); TREX  
8 US1391 (E-mail re: Work Plan and Waste Profile Plans).

9 108. HVI agreed that following disposal of the crude oil-contaminated  
10 solid waste, it would work with DFW representatives to reach agreement on the  
11 percentage (by weight) of the material in the roll-off bins that was crude oil,  
12 calculate the total volume of crude oil in the roll-off bins, and prepare a document  
13 stipulating to the volume of crude oil recovered during the cleanup. Dkt. No.  
14 345-14 (Boggs Decl. at ¶¶ 43-49); TREX US1391 (E-mail re: Work Plan and  
15 Waste Profile Plans).

16 109. Based on the percentage of crude-oil contamination in the solid waste  
17 agreed upon by HVI and DFW, the net weight of the contaminated material, and  
18 the conversion of the mass of crude oil into volume, DFW calculated that there  
19 were 191 barrels (8,020.9 gallons) of crude oil mixed in with the solid waste  
20 recovered during the cleanup of the 7/16/07 Bell Spill. TREX US1372 at  
21 EPA9\_0268896 (DFW Oil Recovery Data); TREX US1458 (DFW Quantitation  
22 and Manifests).

23 110. HVI personnel witnessed a DFW representative measured 103 barrels  
24 of liquid crude oil that had been put into two storage tanks after it was recovered  
25 from the creek during cleanup of the 7/16/07 Bell Spill. The same HVI personnel  
26 signed the DFW field reports documenting DFW's quantification of the liquid  
27 crude oil. TREX US1354 (OSPR Field Report)(4,012 gal. / 42 gal. per bbl = 95  
28

1 bbls); Dkt. No. 400-14 (Sally Dep. Vol I) at 193:14-195:19; TREX US1355  
2 (OSPR Field Report).

3 111. After signing the DFW field reports, HVI adopted DFW's liquid oil  
4 volume calculation in its response to an EPA information request, in Incident  
5 Action Plans which it participated in drafting, and in reports to the Incident  
6 Command and DFW. TREX US1408 at DFG016448 (E-mail re: Work Plan for  
7 Emptying Baker Tank C-210); TREX US1416 at HVI045486 (HVI 308  
8 Response).

9 112. In reliance on the waste profile data for the contaminated solids that  
10 was generated by HVI's contractor, Cole's Services, and the liquid crude oil  
11 volumes quantified by DFW and subsequently adopted by HVI, DFW calculated  
12 that 294 barrels of crude oil were recovered (12,367 gallons divided by 42 gallons  
13 per barrel) from the creek following the 7/16/07 Bell Spill. Dkt. No. 467 at 22:18-  
14 23:16, 27:17-21 (10/23/18 Trial Tr. Vol. I, Test. of Hackstedt); TREX US1372 at  
15 EPA9\_0268879 and EPA9\_0268896 (Investigation Report); TREX US1391 (E-  
16 mail re: Waste Profile & Disposal Plans); Dkt. No. 434-4 (Gross Decl.) at 18-21.

17 113. After receiving an email from DFW notifying him that DFW would  
18 prepare a document stipulating to the volume of oil recovered from the 7/16/07  
19 Bell Spill, on March 18, 2008, HVI's manager for quality assurance, Alvin  
20 Wedderburn, signed a document which states that 294.45 barrels of crude oil  
21 (12,366.9 gallons) were recovered during the cleanup of the 7/16/07 Bell Spill.  
22 TREX US1299 (DFW Quantification); Dkt. No. 434-4 (Gross Decl.) at ¶ 21;  
23 TREX US1391 (Email to Wedderburn).

24 114. Mr. Hackstedt reasonably calculated that the volume of produced  
25 water discharged with the crude oil during the 7/16/07 Bell Spill was roughly  
26 proportionate to the ratio of crude oil and produced water in the production fluids  
27 (1.8% oil to 98.2% produced water). Dkt. No. 442 at Admitted Fact ¶ 5.tt (Final  
28 Pretrial Conf. Order). Since 294 barrels of crude oil were recovered, he reasonably

1 concluded that 16,333 barrels of produced water were discharged during the  
2 7/16/07 Bell Spill. Dkt. No. 345-6 (Hackstedt Decl.) at ¶¶ 33-36 and Ex. A (Rpt.)  
3 at 34-35; US1286 at HVI015731-733 (7/07 Monthly Production Report); US1317  
4 at HVI015728-29 (6/07 Monthly Production Report).

5 115. HVI discharged 16,627 barrels of oil (294 barrels of crude oil and  
6 16,333 barrels of produced water) during the spill from the Bell Facility on July  
7 16, 2007.

8 **D. 12/7/07 Bell Spill Volume**

9 116. On December 7, 2007, HVI reported a spill from the waste water  
10 injection pond known as the Blochman Ponds at the Bell Facility (the 12/7/07 Bell  
11 Spill). Dkt. No. 345-6 (Hackstedt Decl.) at ¶ 37; Dkt. No. 434-3 (Dostal Decl.) at  
12 ¶¶ 13-14; Dkt. No. 467 at 40:16-42:18 (10/23/18 Trial Tr. Vol. I, Test. of  
13 Hackstedt).

14 117. A reasonable estimate of the volume of crude oil and waste water  
15 discharged by HVI during the 12/7/07 Bell Spill can be determined by relying on  
16 HVI's admissions and production records, and the volume of crude oil recovered  
17 during the cleanup. TREX US0996 (Stipulation); TREX US1182 at HVI000538  
18 (HVI 308 Response); Dkt. No. 345-6 (Hackstedt Decl.) at ¶¶ 48-53 and Ex. A  
19 (Rpt. at 36-47); TREX US0883 (Bell Daily Oil Production Rpts. for Dec. 2007).

20 118. Based on missing crude oil from Bell Facility tanks, production and  
21 injection rates reported by HVI, and facility infrastructure and design, Mr.  
22 Hackstedt reasonably concluded that HVI discharged approximately 4,000 barrels  
23 of crude oil and produced water as a result of the 12/7/07 Bell Spill. Dkt. No.  
24 345-6 (Hackstedt Decl.) at ¶¶ 37-53.

25 119. HVI personnel and HVI contractors performed the cleanup of the  
26 12/7/07 Bell Spill, and cleanup activities were coordinated with the Incident  
27 Command and agreed to in writing. TREX US1164 (Initial Incident Action Plan  
28

1 with Greka management signature); Dkt. No. 434-6 (Connell Decl.) at ¶ 36-37;  
2 Dkt. No. 434-4 (Gross Decl.) at ¶ 22-25.

3 120. HVI contractors and personnel worked closely with DFW to  
4 determine the number of barrels of crude oil recovered during the 12/7/07 Bell  
5 Spill. TREX US1182 at HVI00538 (HVI 308 Response); TREX US1061  
6 (Stipulation based on gauges and visual estimates); Dkt. No. 434-4 (Gross Decl.)  
7 at ¶¶ 25-26; TREX 1122 at DFG002200-202 (Carlos Fonseca's Notes).

8 121. HVI representatives and DFW representatives worked together and  
9 reached agreement on the percentage of crude oil in individual roll-off bins.  
10 TREX US1182 at HVI00538 (HVI 308 Response); TREX 1122 (Carlos Fonseca's  
11 notes); Dkt. No. 400-11 (Muñoz Dep. Vol. III) at 366:14-367:2.

12 122. HVI representatives and DFW representatives worked together, using  
13 standard techniques within the industry for measuring oil and water, and reached  
14 agreement on the volume of crude oil that was recovered and placed in storage  
15 tanks. TREX US1061 (Stipulation based on gauges and visual estimates); TREX  
16 US1122 at DFG002200, 202, 204 and 206 (Carlos Fonseca's notes); Dkt. No.  
17 400-12 (Muñoz Dep. Vol. II) at 358:7-360:10, 364:6-10; Dkt. No. 434-4 (Gross  
18 Decl.) at ¶ 26.

19 123. According to HVI's stipulations and admissions, 2,118.54 barrels of  
20 crude oil was recovered from Palmer Road Creek. TREX US1182 at HVI000538  
21 (HVI 308 Response)(total of recover bbls listed in para. 6); TREX US0996  
22 (Stipulation); Dkt. No. 434-4 (Gross Decl.) ¶ 26.

23 124. Based on the forgoing, HVI discharged 4,118 barrels of oil (2,118  
24 barrels of crude oil and 2,000 barrels of produced water) during the spill from the  
25 Bell Facility on December 7, 2007.

26 **E. 1/5/08 Davis Spill Volume**

27 125. On January 5, 2008, HVI reported a spill from the Zaca Facility's  
28 Davis Tank Battery (the 1/5/08 Davis Spill). TREX US0194 (Spill Report). The

1 1/5/08 Davis Spill involved the same injection tank, Tank WW2, that was the  
2 source of the 12/7/05 Davis Spill. Following the failure of one of two waste water  
3 injection pumps, Tank WW2 overfilled and ruptured, spilling crude oil and waste  
4 water into the environment. TREX US0295 at HVI000781 (Failure Analysis);  
5 Dkt. No. 434-3 (Dostal Decl.) at ¶¶ 28-35; TREX US0195 (DFW Investigation  
6 Report); TREX US0550 at EPA9\_0269237 (DFW Photographs); Dkt. No. 345-10  
7 (Wise Decl.) at ¶¶ 34, 41-44.

8 126. A reasonable estimate of the volume of crude oil and waste water  
9 discharged by HVI during the 1/5/08 Davis Spill can be calculated relying on  
10 HVI's production records, the specifications of the equipment that was in use at  
11 the Davis Tank Battery at the time of the spill, and the volume of crude oil  
12 recovered during the cleanup. Dkt. No. 345-6 (Hackstedt Decl.) at ¶¶ 64-67 and  
13 Ex. A (Rpt. at 48-58); TREX US0172 at HVI081542-546 (1/4/08 Davis Daily Oil  
14 Production Reports); TREX US0273 at DFG002397 (James Foto's notes); TREX  
15 US0295 at HVI000697 (list of tanks and container at Davist) and HVI000785-786  
16 (Greka Preliminary Failure Analysis memo); TREX US0520 (1/08 Chamberlin  
17 Monthly Production Report); TREX US0533 at HVI081731-732 (1/4/08  
18 Chamberlin Daily Oil Production Report).

19 127. HVI contractors and personnel were extensively involved in planning  
20 and performing cleanup of the 1/5/08 Davis Spill as well as determining the  
21 number of barrels of crude oil recovered during cleanup of the spill. Dkt. No.  
22 434-2 (Declaration of James Foto ("Foto Decl.)) at ¶¶ 5-7, 13-19; Dkt. No.  
23 345-10 (Wise Decl.) at ¶¶ 38, 45; Dkt. No. 434-6 (Connell Decl.) at ¶¶ 46-49;  
24 Dkt. No. 434-4 (Gross Decl.) at ¶¶ 36-39; TREX US0295 at HV000676-680 (HVI  
25 308 Response).

26 128. Based on production data from the Zaca Facility, the operations  
27 specifications for the injection pumps, and the dimensions and capacity of Tank  
28 WW2, Mr. Hackstedt reasonably concluded that HVI discharged approximately



1 3,252 barrels of total fluid from Tank WW2 during the 1/5/08 Davis Spill,  
2 including at least 618 barrels of crude oil. Dkt. No. 345-6 (Hackstedt Decl.) at  
3 ¶¶ 64-67; Dkt. No. 434-2 (Foto Decl.) at ¶¶ 8-12; DFG002398 (Roper CCD  
4 Pumps Specification Sheet), TREX US0273 at DFG002401 (Pump Sizes) and  
5 DFG002408 (Davis Facility Pump Identification).

6 129. HVI personnel and HVI contractors performed the cleanup of the  
7 1/5/08 Davis Spill, and cleanup activities were coordinated with the Incident  
8 Command and agreed to in writing. Dkt. No. 434-4 (Gross Decl.) at ¶¶ 35-38;  
9 TREX US0199 (IAP); TREX US0224 (IAP); TREX US0234 at HVI047222-224  
10 (E-mails re: Quantification and Sampling Plan) and HVI047235-238 (Memo re:  
11 Sampling Plan); TREX US0236 at HVI046646-656 (E-mail and Memo re: Work  
12 Plan); TREX US0482 (EPA Pollution Report #2); TREX US3139 at  
13 DFG0005596 (Supplemental Environmental Incident Report); Dkt. No. 434-2  
14 (Foto Decl.) at ¶¶ 14, 15, 18.

15 130. HVI's contractors, in coordination with DFW and EPA, sampled the  
16 contaminated solid waste in the roll-off bins and estimated that 275 barrels of  
17 crude oil were recovered as solid waste in the creek during cleanup of the 1/5/08  
18 Davis Spill. Dkt. No. 434-2 (Foto Decl.) at ¶¶ 16-19; TREX US0234 (E-mail and  
19 Memo re: Quantification Sampling Plan); TREX US0236 (E-mail and Memo re:  
20 Work Plan); TREX US0273 at DFG002601-607 (Lab Results) (11,555 gal. / 42  
21 bbls per gal. = 275 bbls); Dkt. No. 434-4 (Gross Decl.) at ¶ 37.

22 131. HVI, its contractors, and representatives from DFW participated in  
23 estimating that 284 barrels of crude oil were recovered as liquid waste from the  
24 creek during the cleanup of the 1/5/08 Davis Spill. Dkt. No. 434-2 (Foto Decl.) at  
25 ¶¶ 13-15; TREX US0199 (IAP); TREX US0224 (IAP); TREX US0295 at  
26 HVI00677 (HVI 308 Response) and HVI000811-812 (Tank Quantification);  
27 TREX US0378 (Letter re: Order for Quantity Survey); TREX US3151 (OSPR  
28 Field Report); Dkt. No. 434-4 (Gross Decl.) at ¶¶ 37-38.

1 132. HVI discharged 3,252 barrels of oil (618 barrels of crude oil and  
2 2,634 barrels of produced water) during the spill from the Davis Tank Battery on  
3 January 5, 2008. This finding is consistent with the volume of crude oil recovered  
4 from the spill.

5 **F. Mr. Hacksteadt's Opinions Are Supported by Dr. Johnson's**  
6 **Estimates of the Cumulative Volume of Oil Discharged**

7 133. Dr. Terrence Johnson holds a Ph.D. in environmental sciences and  
8 engineering from Virginia Tech, an M.S. in soil physics from the University of  
9 Guelph, in Ontario, Canada; and a B.S. in agronomy (soil science) from the  
10 University of West Indies, St. Augustine, in Trinidad. He has over 30 years of  
11 experience as an Environmental Scientist and Engineer assessing, designing, and  
12 implementing soil and groundwater pollution systems at over 100 projects across  
13 the United States and its territories. Dkt. No. 345-7 (Johnson Decl.) at ¶ 3.

14 134. Dr. Johnson's expertise includes evaluation of the mass and  
15 concentration of petroleum hydrocarbons contained in different media, including  
16 soil, groundwater, and surface water. His experience evaluating petroleum  
17 hydrocarbon mass and concentrations has included waste streams generated  
18 during cleanup and site assessment activities. Id. at ¶ 3-8.

19 135. Since 2003, Dr. Johnson has worked as an Environmental Scientist for  
20 the EPA in the Technology Innovation and Field Services Division/Environmental  
21 Response Team in the Office of Land and Emergency Response in Las Vegas,  
22 Nevada. Id. at ¶ 8.

23 136. To calculate the volume of crude oil recovered from the solid waste  
24 streams that were generated during the cleanup of each of the four largest spills,  
25 Dr. Johnson relied on spill-specific data about the mass of the contaminated solids  
26 recovered during spill cleanup operations, the percentage of that mass that was  
27 crude oil, and the density of the crude oil. Then, he calculated the volume of crude  
28 oil mixed with solids using spill-specific data and an equation that is standard in

1 his field for such calculations. Id. at ¶¶ 9-12; Dkt. No. 467 at 52:16-23 (10/23/18  
2 Trial Tr. Vol. I, Test. of Johnson).

3 137. To calculate the volume of crude oil recovered from the liquid waste  
4 streams that were generated during the cleanup of each of the four largest spills,  
5 Dr. Johnson relied on spill-specific data and, as available, the specifications for  
6 the tanks in which recovered liquids were stored. Then, he calculated the volume  
7 of liquid crude oil using the spill-specific data and the tank specifications and an  
8 equation that is standard in his field for such calculations. Dr. Johnson did not  
9 attempt to calculate the volume of produced water which contained oil mixed with  
10 wastes that was discharged. Dkt. No. 345-7 (Johnson Decl.) at ¶ 12; Dkt. No. 467  
11 at 52:16-23 (10/23/18 Trial Tr. Vol. I, Test. of Johnson).

12 138. With respect to the 12/7/05 Davis Spill, Dr. Johnson concluded that  
13 between 1,748 and 2,388 barrels of crude oil were recovered from the solid and  
14 liquid waste streams: between 508 and 1,148 barrels of crude oil from the solid  
15 waste stream, and 1,240 barrels of crude oil from the liquid waste stream. Dkt.  
16 No. 345-7 (Johnson Decl.) at ¶¶ 13-15 (and the exhibits cited therein); Dkt. No.  
17 467 at 61:21-62:9 (10/23/18 Trial Tr. Vol. I, Test. of Johnson).

18 139. With respect to the 7/16/07 Bell Spill, Dr. Johnson concluded that a  
19 total of 304 barrels of crude oil were recovered from the solid and liquid waste  
20 streams that resulted from the July 2007 spill at the Bell Facility: 195 barrels of  
21 crude oil from the solid waste stream, and 109 barrels of oil from the liquid waste  
22 stream. Dkt. No. 345-7 (Johnson Decl.) at ¶¶ 16-18 (and the exhibits cited therein  
23

24 140. With respect to the 12/7/07 Bell Spill, Dr. Johnson concluded that a  
25 total of 1,799 barrels of crude oil were recovered from the solid and liquid waste  
26 streams: 424 barrels of crude oil from the solid waste stream, and 1,375 barrels of  
27 crude oil from the liquid waste stream. Dkt. No. 345-7 (Johnson Decl.) at ¶¶ 19-21  
28 (and the exhibits cited therein).

1 141. With respect to the 1/5/08 Davis Spill, Dr. Johnson concluded that a  
2 total of 526 barrels of crude oil were recovered from solid and liquid waste  
3 streams: 242 barrels of crude oil from the solid waste stream and 284 barrels of  
4 crude oil from the liquid waste stream. Dkt. No. 345-7 (Johnson Decl.) at ¶ 22-24  
5 (and the exhibits cited therein); Dkt. No. 467 at 60:25-61:14 (10/23/18 Trial Tr.  
6 Vol. I, Test. of Johnson).

7 142. In total, Dr. Johnson estimated that approximately 5,000 (4,377 to  
8 5,017) barrels of crude oil were recovered from the solid and liquid waste streams  
9 that resulted from the four largest spills. This amount does not include the volume  
10 of produced water which contained oil mixed with wastes that was discharged.  
11 Dkt. No. 345-7 (Johnson Decl.) at ¶¶ 13-24.

12 **G. HVI's Estimates Regarding the Number of Barrels of Oil**  
13 **Discharged Resulting from the Four Largest Spills Are Unreliable**

14 143. Peter Mesard, P.E., an engineer, testified on behalf of HVI regarding  
15 quantities of oil discharged during the four largest spills.

16 144. Mr. Mesard estimated that the four largest spills, collectively, released  
17 4,517 crude barrels of oil and produced water. TREX HVI0092 (Mesard Rpt. at  
18 23-24).

19 145. Mr. Mesard relied on assumptions, which during cross-examination,  
20 were shown to be speculative at best.

21 146. With respect to the 12/7/05 Davis Spill, Mr. Mesard admitted that he  
22 relied on HVI oil production data from November 2007, close to two years after  
23 the spill, to calculate the volume of oil spilled on December 7, 2005. Dkt. No. \_\_\_\_  
24 at \_\_\_\_ (10/26/18 Trial Tr., Test. of Mesard)<sup>3</sup>. Mr. Mesard admitted that he  
25 assumed that HVI kept the oil pad in Waste Water Tank No. 2 that overflowed  
26 between one and one half and three feet, even though the November 2007 data  
27

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28 <sup>3</sup> As of December 17, 2018, the parties have not yet received the October 26, 2018 trial transcript.

1 that he relied showed multiple days when the oil pad exceeded three feet and  
2 could be up to eight feet. Id. at \_\_\_\_\_. Mr. Mesard criticized Mr. Hackstedt's use  
3 of correction factor data from November 2005, the month before the 12/7/05  
4 Davis Spill, to calculate the volume of oil spilled. While Mr. Mesard tried to  
5 disavow this admission at trial, he conceded at his deposition that it was  
6 appropriate to use correction factor data from the month before the 1/5/08 Davis  
7 Spill to calculate the volume of oil discharged during that spill. Id. at \_\_\_\_\_. Mr.  
8 Mesard also admitted using bin sampling data from the 12/7/08 Davis Spill to  
9 calculate the volume of oil recovered in solids for the 12/7/05 Davis Spill, again  
10 showing his use of inapplicable data to draw dubious conclusions. Id. at \_\_\_\_\_.

11 147. For the 7/16/07 Bell Spill, Mr. Mesard admitted that he used the same  
12 oil to water ratio (2% to 98%) as Mr. Hackstedt to calculate the volume of  
13 produced water released from the failed pipeline. Id. at \_\_\_\_\_. Mr. Mesard  
14 admitted that he used the same method as Dr. Johnson to calculate the volume of  
15 crude oil recovered from solid and liquid waste. But instead of using the certified  
16 HVI contractor estimates of percentages of oil recovered, he used 2% based on the  
17 mistaken assumption that no produced water infiltrated into the creek sediments.  
18 Id. at \_\_\_\_\_. On cross-examination Mr. Mesard conceded that there were many  
19 places in the creek where the produced water infiltrated, evaporated, or moved  
20 further downstream, and that DFW had concluded that the produced water was  
21 absorbed into the ground before the response began. Id. at \_\_\_\_\_.

22 148. With respect to the 12/7/07 Bell Spill, Mr. Mesard based his  
23 calculation on the incorrect assumption that no fluids were flowing out of the  
24 containment area while the Blochman Ponds were overflowing. Mr. Mesard also  
25 mistakenly assumed that the fluids from Wash Tank 1 could not have traveled to  
26 the Blochman Ponds, taking the position that they would have flowed into Pit No.  
27 2, instead of Pit No. 1. Mr. Mesard's opinions are erroneous because the weir  
28

1 system in Pit No. 1 was designed to direct oil from to the Blochman Ponds, and  
2 also because Pit No. 2 is uphill from Pit No. 1. Id. at \_\_\_\_.

3 149. Regarding the 1/5/08 Davis Spill, Mr. Mesard incorrectly based his  
4 calculation of the volume of produced water spilled on the volume of wastewater  
5 recorded at two wells, ignoring data from a third well. Id. at \_\_\_\_.

6 150. The testimony and documentary evidence show that Mr. Mesard's  
7 opinions and conclusions are not as reliable as those of Plaintiffs' experts. Mr.  
8 Mesard has not adequately considered the relevant facts and data, and has not  
9 reliably applied scientific principles and methods to the facts and data of this case.  
10

11 **H. At least 452 Barrels of Oil, Including Produced Water, Were**  
12 **Discharged Resulting from the Other Eight Oil Spills**

13 151. 6/8/05 Bell Spill: HVI discharged 201 barrels of oil (one barrel of  
14 crude oil and 200 barrels of produced water) during the spill from the Bell Facility  
15 on June 8, 2005. Dkt. No. 442 at Admitted Fact ¶ 5.pp (Final Pretrial Conf.  
16 Order).

17 152. 7/13/05 Bell Spill: HVI discharged 70 barrels of oil (20 barrels of  
18 crude oil and 50 barrels of produced water) during the spill from the Bell Facility  
19 on July 13, 2005. Dkt. No. 442 at Admitted Fact ¶ 5.qq (Final Pretrial Conf.  
20 Order).

21 153. 8/11/05 Bell Spill: HVI discharged 22 barrels of oil (2 barrels of  
22 crude oil and 20 barrels of produced water) during the spill from the Bell Facility  
23 on August 11, 2005. Dkt. No. 442 at Admitted Fact ¶ 5.rr (Final Pretrial Conf.  
24 Order).

25 154. 1/29/08 Bell Spill: HVI discharged and recovered 125.9 barrels of  
26 oil from the spill from the Bell Facility on January 29, 2008. TREX US0092 (July  
27 24, 2007 Stipulation Agreement)  
28



1           155.    12/27/08 Bell Spill: HVI discharged and recovered four barrels of  
2 oil from the spill from the Bell Facility on December 27, 2008. Dkt. No. 442 at  
3 Admitted Fact ¶ 5.xx (Final Pretrial Conf. Order).

4           156.    5/1/09 Bell Spill: HVI discharged and recovered nine barrels of  
5 crude oil from the spill from the Bell Facility on May 1, 2009. Dkt. No. 442 at  
6 Admitted Fact ¶ 5.yy (Final Pretrial Conf. Order).

7           157.    10/14/10 Bell Spill: HVI discharged 15 barrels of oil (ten barrels of  
8 crude oil and five barrels of produced water) from the spill from the Bell Facility  
9 on October 14, 2010. Dkt. No. 442 at Admitted Fact ¶ 5.zz (Final Pretrial Conf.  
10 Order).

11           158.    12/21/10 Bell Spill: HVI discharged five barrels of oil (one barrel  
12 of crude oil and four barrels of produced water) from the spill from the Bell  
13 Facility on December 21, 2010. Dkt. No. 442 at Admitted Fact ¶ 5.aaa (Final  
14 Pretrial Conf. Order).

15 **V.    FAILURE TO COMPLY WITH SPCC AND FRP REGULATIONS**

16           159.    HVI failed to comply with Spill Prevention, Control, and  
17 Countermeasure (“SPCC”) and Facility Response Plan (“FRP”) regulations on  
18 numerous occasions, often for extended durations of time, and in spite of ample  
19 opportunity to correct the failures or prevent them from recurring. HVI’s failures –  
20 particularly its failure to develop or implement adequate flowline maintenance  
21 programs and failure to implement adequate secondary containment –contributed  
22 to the occurrence of the oil spills (including nine from pipelines and three resulting  
23 from failed secondary containment) and/or exacerbated their impacts and the  
24 volumes discharged. (See findings on gross negligence in Section IV, infra.)

25           160.    The SPCC regulations applied to each of the 11 Facilities. Under 40  
26 C.F.R. § 112.1(b), each of the 11 Facilities:

27               a.    is or was a non-transportation-related onshore facility engaged  
28 in drilling, producing, gathering, or storing oil or oil products, see supra ¶ 5;

1           b.       could, due to its location, reasonably be expected to discharge  
2 oil in quantities that may be harmful into or upon the navigable waters of the  
3 United States or adjoining shorelines (and, for the Bell and Zaca Facilities, *did*  
4 discharge as such), Dkt. No. 344-1 (Lee Decl.) at Ex. A (Rpt.) at 60-74  
5 (describing flow pathways for oil from 11 Facilities to cause visible sheen or  
6 visible oil droplets on various waters of the United States, including traditional  
7 navigable waters, and their adjoining shorelines); and

8           c.       has or had oil in an aboveground container or in a container that  
9 is not “permanently closed” within the meaning of 40 C.F.R. § 112.2, see TREX  
10 US2968 at HVI027752 (oil storage tanks in Battles SPCC Plan); TREX US2992  
11 at HVI001127 (oil storage tanks in Bell SPCC Plan); TREX US2829 at  
12 HVI001247 (oil storage tanks in Casmalia SPCC Plan); TREX US2966 at  
13 HVI001383 (oil storage tanks in Escolle SPCC Plan); Dkt. No. 345-1 (Calhoon  
14 Decl.) ¶ 21(d) (tanks at Lakeview not clean closed [permanently closed]); TREX  
15 US2832 at HVI001838 (oil storage tanks and containers in SPCC Plan covering  
16 U-Cal, Lloyd, and Security); TREX US2979 at HVI001568 (oil storage tanks and  
17 containers in Los Flores SPCC Plan); Dkt. No. 345-2 (Reich Decl.) at ¶ 65 (tanks  
18 at Williams B contained several feet of heavy crude oil or oily water and oily tank  
19 bottoms); TREX US2851 at HVI001931 (oil storage tanks and containers in Zaca  
20 SPCC Plan).

21           161. The Bell and Zaca Facilities were also subject to the FRP regulations.  
22 See infra at H (Failure to Prepare and Submit Facility Response Plan).

23           162. As described further below, this Court finds that, at the 11 Facilities  
24 listed at Paragraph I.B.5, HVI committed a total of 60 violations under the SPCC  
25 and FRP regulations for a total number of 86,842 days of violation as of August  
26 20, 2018, the previously scheduled date of trial.  
27  
28

163. For any ongoing violation, August 20, 2018, is conservatively used as the end date of the violation to determine a fixed number of days of violation for purposes of calculating civil penalties.

164. At the Bell and Zaca Facilities in particular—where the 12 oil spills occurred—this Court finds that HVI committed a total of 19 violations under the SPCC and FRP regulations for a total number of 24,107 days of violation as of August 20, 2018.

165. Originally promulgated in 1974, the Oil Pollution Prevention regulations at 40 C.F.R. Part 112 have been revised over time, including in 2002. Although in many instances the regulatory citations changed, the 2002 revisions did not change HVI’s obligations under the prior version of the regulatory requirements pertinent to HVI’s liability in this case, such as the requirement to develop and implement a flowline maintenance program. Accordingly, where they differ, the legal citations in this section distinguish between the revised 2002 version (reflected in the 2003 Code of Federal Regulations) and the prior version of the regulations. Because HVI began acquiring the 11 Facilities in 1999, this section cites to the 1998 Code of Federal Regulations as representative of the prior version. Under either version, HVI violated the regulations as follows.

**A. Failure to Develop or Implement Flowline Maintenance Programs**

166. In violation of 40 C.F.R. § 112.9(d)(4)(2010), 40 C.F.R. § 112.9(d)(3) (2003) and 40 C.F.R. § 112.7(e)(5)(iv)(C) (1998), HVI failed to develop and/or implement programs of flowline maintenance—which are interchangeably referred to herein and in the evidence as “flowline maintenance programs” and “pipeline maintenance programs”—for the following facilities for the following durations:

	Facility	Start Date of Violation	End Date of Violation	Number of Days of Violation
1	Battles	11/30/1999	Ongoing	6,838

2	Bell	11/30/1999	Ongoing	6,838
3	Casmalia	11/30/1999	Ongoing	6,838
4	Escolle	11/30/1999	Ongoing	6,838
5	Lakeview	8/31/2002	Ongoing	5,833
6	Lloyd	8/31/2002	Ongoing	5,833
7	Los Flores	8/31/2002	Ongoing	5,833
8	Security	8/31/2002	Ongoing	5,833
9	U-Cal	8/31/2002	1/1/2009	2,315
10	Williams B	6/30/2000	2/26/2010	3,528
11	Zaca	8/31/2002	Ongoing	5,833
<b>TOTAL: 11 violations and 62,360 days of violation</b>				

167. Repeated and continuous company-wide failings support the finding of violations at all 11 Facilities:

a. First, HVI's knowledge and mapping of flowlines at the facilities were incomplete. HVI acquired Bell and other facilities in 1999, yet as of 2006 it still had not mapped the flowlines. TREX US0748 at HVI002009 (HVI's 1/23/06 response to EPA inspection stating, "We are now in the process of mapping out the production flow lines for each lease, which is a major project"). Two years later, HVI still had not mapped them. TREX US2042 at HVI042897 (Jan. 2008 email from Harlan Felt to HVI employees acknowledging lack of pipeline maps and management plan: "We've known we'd someday have to map all the pipelines over all the leases and create a pipeline integrity management plan (PIM) for each lease. . . . No such thing as a PIM without knowing what lines we have and where they are").

b. Second, HVI did not regularly and periodically conduct tests to assess flowline integrity. HVI also did not visually inspect all pipelines, and the inspections it performed were not adequate: a significant portion of its pipelines—buried pipelines or portions of pipelines that are partially buried or in contact with

1 the ground—were not inspected. Dkt. No. 400-11 (Muñoz Dep. Vol I) at 192–195  
2 (pipelines mostly inspected by driving by; buried sections not inspected; and did  
3 not record observations or inspections). HVI also did not adequately protect  
4 flowlines from corrosion. TREX US2500 at EPA9\_0195306 (4/6/2005 NON from  
5 EPA informing HVI that U-Cal, Bell, and Los Flores lacked a regular flowline  
6 maintenance program and flowlines at each facility showed signs of corrosion or  
7 were in poor condition and often the source of oil releases). HVI actually stopped  
8 the use of corrosion inhibitors that its predecessor operator had implemented. Dkt.  
9 No. 400-6 (Dimitrijevic 30(b)(6) Dep.) at 233:9–19 (predecessor operator used  
10 corrosion inhibitors in early 2000, HVI stopped using them after acquiring  
11 facilities). As one example, the flow line in the 7/16/07 Bell Spill lacked internal  
12 and external corrosion protection. Dkt No. 345-11 (Kinworthy Decl.) at ¶ 23(a).  
13 HVI did not implement chemical corrosion inhibitors until 2009, *id.*, and did so  
14 only as a reaction to experiencing the 5/1/09 Bell Spill, TREX US1190 (HVI’s  
15 5/13/09 failure analysis memo stating that introduction of corrosion inhibitor  
16 program was corrective action).

17 c. Third, despite HVI developing a written “Pipeline Integrity  
18 Management Plan” in 2010, the program is incomplete, inadequate, and not fully  
19 implemented. The PMP does not include all lines that are not permanently closed.  
20 Dkt. No. 345-2 (Reich Decl.) at ¶¶ 71(a) and 78(a). Locations of only the active  
21 pipelines are mapped and, if the pipeline is buried, estimated. Dkt No. 361-2  
22 (Dimitrijevic Decl.) at ¶¶ 65-66. The PMP’s procedures (such as pipeline marking)  
23 are not fully implemented, Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at  
24 31, and the PMP remains deficient in terms of flowline assessment, abandonment,  
25 inspections, maintenance, and testing, *id.* at Ex. A (Rpt.) at 28–35.

26 168. Testimony that HVI had a flowline maintenance program, Dkt. No.  
27 361-5 (Felt Decl.) at ¶ 12, and “has always had” one, Dkt. No. 361-2 (Dimitrijevic  
28 Decl.) at ¶ 62, is not credible. Field operators did not corroborate the existence of

1 such a program or pipeline maps. Dkt. No. 400-13 (Proskow Dep.) 153:4–25 (Zaca  
2 Facility operator and then foreman from 2007 to 2009/2010 who did not recall a  
3 pipeline management plan); Dkt. No. 400-11 (Muñoz Dep. Vol. I) at 204:24–  
4 205:15, 208:20-25 (did not recall pipeline management plan or map of all pipelines  
5 during tenure as Bell Facility operator from 2002/2003 to 2005/2006). HVI itself  
6 acknowledged having no pipeline management plan or regular  
7 inspection/maintenance schedule. TREX US2496 at HVI002015 (HVI’s 6/29/07  
8 response to Lakeview, Los Flores, and Lloyd NOV: “Once we have a PMP we will  
9 then develop a schedule for regular inspection and maintenance of our pipelines  
10 that is in addition to our continued I&M [inspection and maintenance]  
11 program....”). Multiple SPCC Plans for various facilities answered “No” in  
12 response to “Does a regular program of flowline maintenance exist for each oil  
13 flowline to reduce the likelihood of discharge?” E.g., TREX US2968 at  
14 HVI027759 (2005 SPCC Plan for Battles Facility), TREX US2860 at  
15 EPA9\_0032802 (2008 SPCC Plan for Zaca Facility).

16 169. Facility-specific inspections further confirm the lack of a flowline  
17 maintenance program.

18 170. Battles Facility: There was no flowline maintenance program. TREX  
19 US2950 at EPA9\_0008549 (2008 inspection report).

20 171. Bell Facility: There was no flowline maintenance program. TREX  
21 US2954 at EPA9\_0008535 (2005 inspection report).

22 172. Los Flores Facility: There was no flowline maintenance program and  
23 no record of any flowline inspections or tests. TREX US2948 at EPA9\_0008541  
24 (2005 inspection report).

25 173. Security Facility: There was no flowline maintenance program. TREX  
26 US2946 at EPA9\_0086117 (2008 inspection report).

27 174. U-Cal Facility: There was no flowline maintenance program. TREX  
28 US2956 at EPA9\_0008638 (2008 inspection report).



175. Williams B Facility: There was no flowline maintenance program. TREX US3076 at EPA9\_0036167 (2008 inspection report).

176. Zaca Facility: There was no flowline maintenance program. TREX US2860 at EPA9\_0032802 (2008 SPCC Plan answering “No” in response to “Does a regular program of flowline maintenance exist for each oil flowline to reduce the likelihood of discharge?”).

177. The violations began on the dates HVI commenced owning and/or operating each facility (i.e., the respective dates HVI became subject to the requirement for each facility). See supra ¶ 5(a)-(k) (dates when ownership commenced). The violations continued until HVI ceased owning and operating a facility (U-Cal and Williams B, see supra ¶ 5(k)-(l)) or are ongoing at the remaining facilities based on the incomplete and inadequate programs for representative facilities Bell and Zaca and the incomplete and inadequate implementation of the program across the facilities. See supra ¶ 167.c. For purposes of calculating a civil penalty, and consistent with the United States’ exercise of enforcement discretion (Dkt. No. 349-2 at Appendix A), the Court calculates a single companywide penalty per day counting from the earliest date that an EPA inspection documented a violation (January 12, 2005, Los Flores inspection) through the date of HVI’s written Pipeline Integrity Management Plan (August 1, 2010), for a total of 2,027 days of violation.

**B. Failure to Provide and Maintain Adequate Containment and Drainage Controls**

178. In violation of 40 C.F.R. § 112.7(c), 112.7(h)(1), and 112.9(c)(2) (2003) and 40 C.F.R. § 112.7(c), 112.7(e)(4), and 112.7(e)(5) (1998), HVI failed to provide and maintain adequate secondary containment and drainage controls at the following facilities for the following durations:

Facility	Start Date of Violation	End Date of Violation	Number of Days of Violation
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1	1	Battles	1/12/2005	Ongoing	4,968
2	2	Battles	12/6/2006	12/7/2006	1
3	3	Battles	2/12/2008	2/13/2008	1
4	4	Bell	1/13/2005	1/14/2005	1
5	5	Bell	12/19/2007	12/20/2007	1
6	6	Bell	1/29/2008	1/30/2008	1
7	7	Bell	2/9/2016	2/10/2016	1
8	8	Casmalia	2/12/2008	2/13/2008	1
9	9	Lakeview	3/27/2007	3/28/2007	1
10	10	Lloyd	3/27/2007	3/28/2007	1
11	11	Los Flores	3/27/2007	3/28/2007	1
12	12	Security	2/12/2008	2/13/2008	1
13	13	U-Cal	2/12/2008	2/13/2008	1
14	14	Williams B	2/19/2008	2/20/2008	1
15	15	Williams B	3/21/2008	3/22/2008	1
16	16	Zaca	12/9/2005	12/10/2005	1
17	17	Zaca	10/22/2006	1/5/2008	440
18	18	Zaca	1/5/2008	1/6/2008	1
19	<b>TOTAL: 18 violations and 5,424 days of violation</b>				

179. Battles Facility: On January 12, 2005, the facility had inadequate secondary containment and drainage controls. TREX US2952 at EPA9\_0008526 (photo 2) and -8527 (insufficient drainage controls in area used for loading crude oil into tank trucks) and at EPA9\_0008527 and -0008530 (photo 6) (large heater-treater used to separate water and crude oil had no secondary containment). The heater-treater deficiency was resolved by February 12, 2008. Dkt. No. 345-2 (Reich Decl.) at ¶ 44. However, as of December 2014, the facility still had inadequate drainage controls. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A. (Rpt.) at 38 (truck-loading area lacked drainage controls). On December 6, 2006, the

1 facility had inadequate secondary containment. TREX US2953 at EPA9\_0008477  
2 (photo 3) and -8478 to -8479 (trench cut through secondary containment wall four  
3 to five weeks earlier completely compromised integrity of secondary containment)  
4 and at EPA9\_0008477 (photo 4) and -8478 to -8479 (height of containment wall  
5 degraded from erosion). On February 12, 2008, the facility had inadequate  
6 secondary containment. TREX US2950 at EPA9\_0008551 and -8558 (photo 9)  
7 (several berms eroded and deteriorating).

8 180. Bell Facility: On January 13, 2005, the facility had inadequate  
9 secondary containment and drainage controls. TREX US2954 at EPA9\_0008535  
10 and -8537 (photos 3 and 4) (vapor knockout vessel and pump unit were outside of  
11 secondary containment and a berm acting as drainage control was eroded). On  
12 December 19, 2007, the facility had inadequate secondary containment. TREX  
13 US1175 at EPA9\_0008566 and -8573 (photo 8) (cinder block missing from  
14 containment wall at facility's Blochman Ponds). On January 29, 2008, the facility  
15 had inadequate secondary containment. TREX US1175 at EPA9\_0008566 and -  
16 8578 (photo 17) (oil transfer piping ran along top of containment berm rather than  
17 within berm). On February 9, 2016, the facility had inadequate secondary  
18 containment and drainage controls. TREX US2858 at 8-9, 11, A-1, and E-1 (truck  
19 transfer area lacked sufficient drainage controls or secondary containment, and Pit  
20 #2 (used for oil storage) lacked secondary containment).

21 181. Casmalia Facility: On February 12, 2008, the facility had inadequate  
22 secondary containment. TREX US2957 at EPA9\_0008600 and -8604 to -8605  
23 (photos 5-7) (berms eroded and asphaltic covering crumbling and failing in many  
24 locations).

25 182. Lakeview Facility: On March 27, 2007, the facility lacked adequate  
26 secondary containment. TREX US2822 at EPA9\_0008484 to -8485 (two tanks  
27 located outside any secondary containment).  
28

1           183. Lloyd Facility: On March 27, 2007, the facility had inadequate  
2 secondary containment. TREX US2822 at EPA9\_0008482 (photo 8) and -8483 to -  
3 8485 (secondary containment for lower tank battery was compromised in several  
4 locations).

5           184. Los Flores Facility: On March 27, 2007, the facility had inadequate  
6 secondary containment. TREX US2822 at EPA9\_0008481 (photo 1), -8483, and -  
7 8485 (secondary containment for main stock tank was compromised in one  
8 corner).

9           185. Security Facility: On February 12, 2008, the facility had inadequate  
10 secondary containment and drainage controls. TREX 2946 at EPA9\_0008611, -  
11 8616, and -8620 to -8627 (photos 4-17) (drainage controls and secondary  
12 containment systems incapable of containing a spill: fuel transfer area had  
13 inadequate drainage controls; containment walls were deteriorated by cracks,  
14 holes, and erosion; and capacity of secondary containment system was diminished  
15 by accumulation of sand within containment areas).

16           186. U-Cal Facility: On February 12, 2008, the facility had inadequate  
17 secondary containment. TREX US2956 at EPA9\_0008636, -8640, and -8650 to  
18 8651 (photos 16-18) (two tanks had no secondary containment).

19           187. Williams B Facility: Before March 19, 2008, the facility had no  
20 drainage controls or secondary containment. TREX US3076 at EPA9\_0036163, -  
21 36166, and -36170 to -36172 (photos 2-7) (freshly constructed berms with no  
22 evidence they existed before the week of EPA inspection). On March 21, 2008, the  
23 facility had inadequate secondary containment. TREX US3076 at EPA9\_0036163  
24 and -36174 to -36175 (photos 12-13) (heater-treater vessel and a free-water knock-  
25 out tank were outside of any containment system).

26           188. Zaca Facility: On December 9, 2005, the facility lacked adequate  
27 secondary containment. TREX US0873 at EPA9\_0008519 to -8522 (photos 11 and  
28 12) (secondary containment deficiencies allowed 12/05 Spill to escape from

1 containment: unit for facility's Davis tank battery was inadequate to contain  
2 capacity of largest tank in unit; poor maintenance led to irregular height, animal  
3 burrowing, and erosion of containment unit). On October 22, 2006, the facility  
4 lacked adequate secondary containment. Dkt. No. 434-3 (Dostal Decl.) at ¶ 54  
5 (describing 2006 spill where oil and waste water flowed out of earthen  
6 containment facility via same unchecked pipe involved in 1/05/08 Davis Spill);  
7 TREX US0550 at DFG026226 to -26227 (photos of 2006 spill). This deficiency  
8 was not corrected until after the 1/05/08 Davis Spill. Dkt. No. 400-13 (Proskow  
9 Dep.) at 159:11-23 (no valve on pipe before 1/5/08 Davis Spill). On January 5,  
10 2008, the facility lacked adequate secondary containment. TREX US0560 at  
11 EPA9\_0008676, -8682 (photo 8), and -8684 (photos 11 and 12) (berms eroded,  
12 uneven, poorly compacted, and undermined by rodent burrows; asphaltic covering  
13 non-uniform and crumbling in several locations).

14 189. With the exception of Violations #1, #14, and #17, the Court finds  
15 that the violations occurred on the dates the EPA inspectors observed or learned of  
16 the inadequate containment or drainage control. The Court finds that Violation #1  
17 (inadequate drainage control at Battles) began on the date of EPA's inspection  
18 (January 12, 2005) and is ongoing. Dkt 345-11 (Kinworthy Decl.) at Ex. A (Rpt.)  
19 at 38. The Court also finds that Violation #14 (lack of secondary containment at  
20 Williams B before March 19, 2008) occurred on February 19, 2008, one month  
21 before the EPA inspection that determined that earthen berms around equipment  
22 had been freshly constructed and had not previously been in place. Dkt. No. 345-2  
23 (Reich Decl.) at ¶ 66(b) and (f). The Court also finds that Violation #17  
24 (inadequate secondary containment at Zaca) began on the date of a spill that  
25 escaped secondary containment through an unchecked pipe (October 22, 2006) and  
26 lasted through the 1/5/08 Davis Spill that escaped secondary containment through  
27 the same pipe. Dkt. No. 434-3 (Dostal Decl.) at ¶ 54. These durations are  
28 conservative because the violations likely or in fact began before the observations

and because HVI's pattern of conduct shows it likely did not correct them within a month. For example, Violation #1 has continued for years and Violation #17 lasted for over a year. See also this Section VI throughout (describing violations that lasted for years) and Section IV (gross negligence) (describing EPA's repeated communications with HVI about deficiencies that were not corrected for years). For purposes of calculating a civil penalty, and consistent with the United States' exercise of enforcement discretion (Dkt. No. 349-2 at Appendix A), the Court counts one day of violation per violation, occurring on the date of EPA's inspection, for a total of 18 days of violation.

### C. Failure to Prepare SPCC Plans

190. In violation of 40 C.F.R. § 112.3 and 112.7, HVI failed to prepare SPCC Plans for the Lakeview Facility and the Williams B Facility for the following durations:

	Facility	Start Date of Violation	End Date of Violation	Number of Days of Violation
1	Lakeview	3/27/2007	6/29/2007	94
2	Williams B	3/21/2008	2/26/2010	707
<b>TOTAL: 2 violations and 801 days of violation</b>				

191. Lakeview Facility: On March 27, 2007, HVI lacked an SPCC Plan. Dkt. No. 345-1 (Calhoon Decl.) at ¶¶ 19, 20, and 21(a) (no SPCC Plan as of March 2007 despite oil storage capacity and location relative to Santa Maria River and Pacific Ocean).

192. Williams B Facility: On March 21, 2008, HVI lacked an SPCC Plan. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 64, 65, 66(a), and 68 (no SPCC Plan as of March 2008 inspection despite oil storage capacity and location relative to Santa Maria River, and the lack of substance about Williams B in Fullerton SPCC Plan was tantamount to having no SPCC Plan).

193. The Court conservatively finds that the violations began on the respective inspection dates for Lakeview and Williams B even though the record



lacks evidence of SPCC Plans existing before the inspections. The violation at Lakeview continued until HVI developed an SPCC Plan dated June 29, 2007. Dkt. No. 442 at Admitted Fact ¶ 5. (Final Pretrial Conf. Order) (“HVI had a Spill Prevention, Control, and Countermeasure (“SPCC”) plan as of June 29, 2007, for the Lakeview lease.”); TREX US2863 (6/29/07 SPCC Plan). The violation at Williams B continued until HVI ceased owning and operating the facility on February 26, 2010. Supra ¶ 5(j). For purposes of calculating a civil penalty, and consistent with the United States’ exercise of enforcement discretion (Dkt. No. No. 349-2 at Appendix A), the Court counts one day of violation per violation, occurring on the respective dates of EPA’s inspections (March 27, 2007, for Lakeview and March 21, 2008, for Williams B), for a total of 2 days of violation.

#### **D. Failure to Review, Amend, and Recertify SPCC Plan**

194. In violation of 40 C.F.R. § 112.5, HVI failed to periodically review, amend as necessary, and recertify its SPCC Plan for the Zaca Facility for the following duration:

	<b>Facility</b>	<b>Start Date of Violation</b>	<b>End Date of Violation</b>	<b>Number of Days of Violation</b>
<b>1</b>	Zaca	12/9/2005	12/20/2005	11

195. On December 9, 2005, HVI had not reviewed, amended, and recertified the SPCC Plan for the Zaca Facility since the prior operator’s SPCC Plan dated 1988 and despite having added an additional tank to the Davis Tank Battery. TREX US0873 at EPA9\_0008522 (2005 inspection report).

196. The Court conservatively finds that the violation began on December 9, 2005 (even though the deficient SPCC Plan preceded the inspection) and continued until HVI recertified the SPCC Plan on December 20, 2005. TREX US2839 at HVI016673 (12/20/05 SPCC Plan certification). For purposes of calculating a civil penalty, and consistent with the United States’ exercise of enforcement discretion (Dkt. No. 349-2 at Appendix A), the Court counts one day

of violation, occurring on the date of EPA's inspection (December 9, 2005), for a total of 1 day of violation.

### **E. Failure to Develop Adequate SPCC Plans**

197. HVI failed to develop adequate SPCC Plans for the following facilities for the following durations by failing to include adequate detail regarding discharge prevention and drainage controls, in violation of 40 C.F.R. § 112.7(a)(3) (2003) and 40 C.F.R. § 112.7(c) (1998); failing to include adequate written inspection procedures and inspection records, in violation of 40 C.F.R. § 112.7(e) (2003) and 40 C.F.R. § 112.7(e)(8) (1998); and failing to address onshore oil drilling and workover facility requirements set forth in the SPCC regulations, in violation of 40 C.F.R. § 112.10 (2003) and 40 C.F.R. § 112.7(e)(6) (1998).

	<b>Facility</b>	<b>Start Date of Violation</b>	<b>End Date of Violation</b>	<b>Number of Days of Violation</b>
<b>1</b>	Battles	1/12/2005	5/5/2011	2,304
<b>2</b>	Bell	1/13/2005	4/27/2011	2,295
<b>3</b>	Casmalia	2/12/2008	4/7/2011	1,150
<b>4</b>	Escolle	2/12/2008	4/7/2011	1,150
<b>5</b>	Security	2/12/2008	1/28/2011	1,081
<b>6</b>	U-Cal	2/12/2008	1/1/2009	324
<b>7</b>	Zaca	1/5/2008	4/7/2011	1,188
<b>TOTAL: 7 violations and 9,492 days of violation</b>				

198. Battles Facility: On January 12, 2005, and again on February 12, 2008, the SPCC Plans failed to address onshore oil drilling and workover facility requirements. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 13(a) and 42(b).

199. Bell Facility: On January 13, 2005, and again on January 29, 2008, the SPCC Plans failed to include adequate detail regarding discharge prevention and drainage controls and failed to address onshore oil drilling and workover facility requirements. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 23(a), 31(a), and 31(b).

1           200. Casmalia Facility: On February 12, 2008, the SPCC Plan failed to  
2 address onshore oil drilling and workover facility requirements. Dkt. No. 345-2  
3 (Reich Decl.) at ¶ 48(a).

4           201. Escolle Facility: On February 12, 2008, the SPCC Plan failed to  
5 address onshore oil drilling and workover facility requirements. Dkt. No. 345-2  
6 (Reich Decl.) at ¶ 48(a).

7           202. Security Facility: On February 12, 2008, the SPCC Plan failed to  
8 include adequate detail regarding discharge prevention and drainage controls,  
9 failed to include adequate written inspection procedures and inspection records,  
10 and failed to address onshore oil drilling and workover facility requirements. Dkt.  
11 No. 345-2 (Reich Decl.) at ¶ 53(a)-(b) and (e).

12           203. U-Cal Facility: On February 12, 2008, the SPCC Plan failed to  
13 address onshore oil drilling and workover facility requirements. Dkt. No. 345-2  
14 (Reich Decl.) at ¶ 59(b).

15           204. Zaca Facility: On January 5, 2008, the SPCC Plan failed to address  
16 onshore oil drilling and workover facility requirements. Dkt. No. 345-2 (Reich  
17 Decl.) at ¶ 37(a).

18           205. The Court conservatively finds that the violations began on the  
19 respective dates of inspection (or earliest inspection) for each facility, even though  
20 each violation arguably began on the effective date of the inadequate SPCC Plan  
21 (i.e., began before the inspection). The violations either continued until HVI ceased  
22 owning and operating the facility, see supra ¶ I.B.5(k) (U-Cal), or continued until  
23 HVI remedied the deficiencies in the facility's SPCC Plans (Battles, Bell,  
24 Casmalia, Escolle, Security, Zaca). Dkt. No. 442 at Admitted Fact ¶¶ 5.wwv (Final  
25 Pretrial Conf. Order) (Battles) ["HVI remedied the SPCC plan deficiencies alleged  
26 in the First Amended Complaint as to the Battles Facility on May 5, 2011."]; 5.vvv  
27 (Bell) ["HVI remedied the SPCC plan deficiencies alleged in the First Amended  
28 Complaint as to the Bell Facility on April 27, 2011."]; 5.uuu (Casmalia, Escolle,

and Zaca) [“HVI remedied the SPCC plan deficiencies alleged in the First Amended Complaint as to the Casmalia, Zaca, and Escolle Facilities on April 7, 2011.”]; 5.ttt (Security) [“HVI remedied the SPCC plan deficiencies alleged in the First Amended Complaint as to the Security Facility on January 28, 2011.”]. For purposes of calculating a civil penalty, and consistent with the United States’ exercise of enforcement discretion (Dkt. No. 349-2 at Appendix A), the Court counts one day of violation per violation, occurring on the respective dates of EPA’s inspection or earliest inspection, for a total of 7 days of violation.

**F. Failure to Inspect for and Remove Accumulations of Discharged Oil**

206. In violation of 40 C.F.R. § 112.9(b)(1) and (2) (2003) and 40 C.F.R. § 112.7(e)(5)(ii) (1998), HVI failed to inspect for and remove accumulations of discharged oil at the following facilities for the following durations:

	Facility	Start Date of Violation	End Date of Violation	Number of Days of Violation
1	Battles	1/12/2005	1/13/2005	1
2	Battles	12/6/2006	12/7/2006	1
3	Battles	2/12/2008	2/13/2008	1
4	Bell	1/13/2005	1/14/2005	1
5	Bell	12/19/2007	12/20/2007	1
6	Bell	1/29/2008	1/30/2008	1
7	Casmalia	2/12/2008	2/13/2008	1
8	Los Flores	3/27/2007	3/28/2007	1
9	Security	2/12/2008	2/13/2008	1
10	U-Cal	10/25/2005	10/26/2005	1
11	U-Cal	2/12/2008	2/13/2008	1
12	U-Cal	3/21/2008	3/22/2008	1
13	Williams B	3/21/2008	3/22/2008	1
14	Zaca	12/9/2005	12/10/2005	1

15	Zaca	1/5/2008	1/6/2008	1
<b>TOTAL: 15 violations and 15 days of violation</b>				

207. Battles Facility: On January 12, 2005, December 6, 2006, and February 12, 2008, the facility had unremoved accumulations of discharged oil. TREX US2952 at EPA9\_0008526-27 (2005 inspection report: leaking pipes and spilled oil); TREX US2953 at EPA9\_0008479 (2006 inspection report: oil leaks at pipe elbow and heater treater) and -8477 (photos 5 and 6); TREX US2950 at EPA9\_0008551 (2008 inspection report: accumulation of oil at compressor pump) and -558 (photo 10).

208. Bell Facility: On January 13, 2005, December 19, 2007, and January 29, 2008, the facility had unremoved accumulations of discharged oil. TREX US2954 at EPA9\_0008535 (2005 inspection report: accumulation of oil at pump unit) and -8537 (photo 3); TREX US1175 at EPA9\_0008566 (2007/2008 inspection report: Pit #2 full of oil on December 19, 2007, and still full of oil on January 29, 2008) and -8571 (photo 4).

209. Casmalia Facility: On February 12, 2008, the facility had unremoved accumulations of discharged oil. TREX US2957 at EPA9\_00085600 (2008 inspection report: accumulation of oil on stormwater within containment area) and -602 to -603 (photos 1-3).

210. Los Flores Facility: On March 27, 2007, the facility had unremoved accumulations of discharged oil. TREX US2822 at EPA9008485 (2007 inspection report: accumulations of oil at transfer equipment).

211. Security Facility: On February 12, 2008, the facility had unremoved accumulations of discharged oil. TREX US2946 at EPA9\_008614-16 (2008 inspection report: accumulations of spilled crude oil).

212. U-Cal Facility: On October 25, 2005, February 12, 2008, and March 21, 2008, the facility had unremoved accumulations of discharged oil. TREX US2990 at EPA0008513 (2005 inspection report) and -8504 to -8506 (photos 6,

1 12, and 15-17); TREX US2956 at EPA9\_0008640 (2008 inspection report:  
2 accumulations of spilled oil throughout and accumulations of oil and water in  
3 omni-vessel sand pits and produced water pits), -8643 to -8644 (photos 2 and 3),  
4 and -8649 to -8650 (photos 14 and 15).

5 213. Williams B Facility: On March 21, 2008, the facility had unremoved  
6 accumulations of discharged oil. TREX US3076 at EPA9\_0036166 (2008  
7 inspection report: accumulations of oil on rainwater).

8 214. Zaca Facility: On December 9, 2005, and January 5, 2008, the facility  
9 had unremoved accumulations of discharged oil. TREX US0873 at  
10 EPA9\_0008522 (2005 inspection report: accumulated oil within Chamberlin Tank  
11 Battery and Davis Tank Battery); TREX US0560 at EPA9\_0008677 (2008  
12 inspection report: accumulations at Chamberlin Tank Battery and Davis Tank  
13 Battery) and -8685 to -8688 (photos 14-20).

14 215. The violations occurred, at the least, on the dates when EPA  
15 inspectors observed accumulations of discharged oil at the facilities. Absent  
16 evidence of specific dates when HVI removed each accumulation, the Court  
17 conservatively finds that each violation lasted one day. These durations are  
18 conservative because the violations likely or in fact began before the observations;  
19 some accumulations were observed in the same place in inspections that took place  
20 weeks apart, indicating they had not been removed in the interim (e.g., Bell  
21 2007/2008 inspections and U-Cal 2008 inspections); and HVI's pattern of conduct  
22 shows it likely did not correct them within a month. For example, Violations #5  
23 and #6 concern the same pit full of oil over one month apart. See also this Section  
24 VI throughout (describing violations that lasted for years) and Section IV (gross  
25 negligence) (describing EPA's repeated communications with HVI about  
26 deficiencies that were not corrected for years). For purposes of calculating a civil  
27 penalty, and consistent with the United States' exercise of enforcement discretion  
28 (Dkt. No. 349-2 at Appendix A), the Court counts one day of violation per



violation, occurring on the dates of EPA's inspections, for a total of 15 days of violation.

### **G. Failure to Use Compatible Containers for Oil Storage**

216. In violation of 40 C.F.R. § 112.9(c)(1) (2003) and 40 C.F.R. § 112.7(e)(5)(iii)(A) (1998), HVI used containers for the storage of oil whose material and construction were incompatible with the material stored and the conditions of storage at the following facilities for the following durations:

	<b>Facility</b>	<b>Start Date of Violation</b>	<b>End Date of Violation</b>	<b>Number of Days of Violation</b>
<b>1</b>	Battles	1/12/2005	3/12/2008	1,155
<b>2</b>	Lakeview	3/27/2007	4/27/2007	31
<b>3</b>	Lloyd	3/27/2007	4/27/2007	31
<b>4</b>	Williams B	3/21/2008	4/21/2008	31
<b>TOTAL: 4 violations and 1,248 days of violation</b>				

217. Battles Facility: On January 12, 2005, December 6, 2006, and February 12, 2008, HVI used a container called tank U-903—and described variously in inspection reports as “U-903,” “903,” and “UO 903”—for the storage of oil whose material and construction were incompatible with the material stored and the conditions of storage. TREX US2952 at EPA9\_0008527 (2005 inspection report: tank with severe corrosion) and -8526 (photo 1); TREX US2953 at EPA9\_0008479 (2006 inspection report: tank with severe corrosion) and -8477 (photos 1 and 2); TREX US2950 at EPA9\_0008547 and -8549 to -8551 (2008 inspection report: tank with severe corrosion was in same condition during 2005 and 2006 inspections), and -8554 (photos 1 and 2).

218. Lakeview Facility: On March 27, 2007, HVI used containers for the storage of oil whose material and construction were incompatible with the material stored and the conditions of storage. TREX US 2822 at EPA9\_0008485 (2007 inspection report: significant corrosion damage in tanks).

1           219. Lloyd Facility: On March 27, 2007, HVI used containers for the  
2 storage of oil whose material and construction were incompatible with the material  
3 stored and the conditions of storage. TREX US 2822 at EPA9\_0008485 (2007  
4 inspection report: significant corrosion damage in tanks).

5           220. Williams B Facility: On March 21, 2008, HVI used containers for the  
6 storage of oil whose material and construction were incompatible with the material  
7 stored and the conditions of storage. TREX US 3076 at EPA9\_0036166 (2008  
8 inspection report: tanks leaking and falling apart).

9           221. The violations occurred, at the least, on the dates when EPA  
10 inspectors observed the incompatible containers storing oil at the facilities. At the  
11 Battles Facility, the violation occurred, at the least, throughout the continuous  
12 period from January 12, 2005, through February 12, 2008, as evidenced by the  
13 consistently corroded condition of tank U-903 observed by EPA inspectors on  
14 January 12, 2005, December 6, 2006, and February 12, 2008.

15           222. Absent credible contradicting evidence in the record, the Court  
16 reasonably infers that the violations continued for one month after the sole  
17 observation in an EPA inspection (Lakeview, Lloyd, and Williams B) or continued  
18 for one month after the last observation in an EPA inspection (Battles). These  
19 durations are conservative because the violations likely or in fact began before the  
20 observations; large tanks require time to acquire and replace; and HVI's pattern of  
21 conduct shows it likely would not have corrected them within a month. For  
22 example, despite severe corrosion of tank U-903 noted in three separate EPA  
23 inspections over three years, HVI did not permanently close, repair, or replace it in  
24 that time period. It finally replaced tank U-903 sometime before December 2014.  
25 Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 39 (new tank was in place of  
26 U-903 by December 2014). See also this Section VI throughout (describing  
27 violations that lasted for years) and Section IV (gross negligence) (describing  
28 EPA's repeated communications with HVI about deficiencies that were not

corrected for years). For purposes of calculating a civil penalty, and consistent with the United States’ exercise of enforcement discretion (ECF No. 349-2 at Appendix A), the Court counts one day of violation per violation, occurring on the dates of EPA’s inspections, for a total of 4 days of violation.

#### **H. Failure to Prepare and Submit Facility Response Plan (FRP)**

223. In violation of 40 C.F.R. § 112.20, HVI failed to prepare and submit to EPA Facility Response Plans for the Bell Facility and the Zaca Facility for the following durations:

	<b>Facility</b>	<b>Start Date of Violation</b>	<b>End Date of Violation</b>	<b>Number of Days of Violation</b>
<b>1</b>	Bell	7/14/2005	Ongoing	4,785
<b>2</b>	Zaca	6/10/2006	11/6/2013	2,706
<b>TOTAL: 2 violations and 7,491 days of violation</b>				

#### **224. Bell Facility:**

a. As of January 13, 2005, the Bell Facility had a total oil storage capacity greater than or equal to 1 million gallons. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 22, 30 (619,500 gallons in aboveground tanks plus 1,155,000 gallons in Pits #1 and #2 for 1,774,500 total gallons during 2005 and 2007/2008 inspections). The Bell Facility SPCC Plans do not accurately describe the facility’s total oil storage capacity because they inaccurately characterize Pit #2 as secondary containment for uphill tanks even though Pit #2 is routinely used to store oil. Dkt. No. 345-2 (Reich Decl.) at ¶ 31(e) (Pit #2 “full of oil” during inspections in 2007 and 2008), ¶ 71(d) (Pit #2 contained “a significant quantity of oil” during 2016 inspection and “routinely holds a significant quantity of oil and is really used as a form of general containment”). Thus Pit #2’s capacity—609,000 gallons—is properly counted towards the facility’s total oil storage capacity. Dkt. No. 345-2 (Reich Decl.) at ¶ 71(d) (“The constant presence of oil undercuts its use as containment for the uphill tanks....”); TREX US2992 (2004 SPCC Plan) at HVI001130 (showing capacity of 14,500 barrels, equivalent to 609,000 gallons based on conversion of 1

1 barrel=42 gallons). Counting Pit #2 and all aboveground tanks that are not  
2 permanently closed, the Bell Facility's total oil storage capacity continues to be  
3 greater than 1 million gallons. Dkt. No. 345-2 (Reich Decl.) at ¶ 73 (total oil  
4 storage capacity of 1,070,000 gallons during 2016 inspection).

5 b. As of January 13, 2005, the Bell Facility was located in an area  
6 identified as critical habitat for threatened and endangered species, including the  
7 California tiger salamander and red-legged frog. Dkt. No. 435-1 (Barron Decl.) at  
8 ¶ 7 (Bell Facility within potential range of habitat for these species). Thus, the  
9 Bell Facility is located at a distance such that a discharge from it could cause  
10 injury to fish and wildlife and sensitive environments.

11 c. Thus, as of January 13, 2005, at the latest, HVI-CC was  
12 required to prepare and submit to EPA a FRP for the Bell Facility within six  
13 months, i.e., no later than July 13, 2005. See 40 C.F.R. § 112.20(a)(2)(iv)  
14 (owner/operator of facility that is required to prepare and submit FRP after August  
15 30, 1994, as a result of unplanned change in facility characteristics that renders  
16 facility subject to criteria in § 112.20(f)(1) shall submit FRP to EPA Regional  
17 Administrator within six months of unplanned change).

18 d. Alternatively, as of the 7/16/07 Bell Spill of 16,627 barrels  
19 (698,334 gallons) of oil, the Bell Facility had had a reportable discharge in an  
20 amount greater than or equal to 10,000 gallons within the last five years, and thus,  
21 as of July 16, 2007, HVI was required to prepare and submit to EPA a FRP for the  
22 Bell Facility no later than January 16, 2008. As late as the 12/7/07 Bell Spill of  
23 4,118 barrels (172,956 gallons), the Bell Facility had had a reportable discharge in  
24 an amount greater than or equal to 10,000 gallons with the last five years.

25 e. HVI has not submitted to EPA a FRP for the Bell Facility. Dkt.  
26 No. 345-2 (Reich Decl.) ¶ 73.

27 f. The Court finds that the violation at the Bell Facility began on  
28 July 14, 2005, and is ongoing because HVI must still prepare and submit a FRP to

1 EPA because it continues to meet the 1-million-gallon threshold and is located at a  
2 distance such that a discharge from it could cause injury to fish and wildlife and  
3 sensitive environments.

4 225. Zaca Facility:

5 a. As of December 9, 2005, the Zaca Facility had a total oil  
6 storage capacity greater than or equal to 1 million gallons. Dkt. No. 345-1  
7 (Calhoon Decl.) ¶ 9 (1,176,000 gallons in aboveground tanks at the facility's  
8 Davis and Chamberlin tank batteries during 2005 inspection).

9 b. Also as of December 9, 2005, secondary containment for the  
10 Zaca Facility's Davis Tank Battery was not sufficiently large to contain the  
11 capacity of the largest tank. TREX US0873 at EPA9\_0008519 (secondary  
12 containment "inadequate to contain contents of largest single tank (3,000 bbls.) at  
13 this facility as demonstrated from spill incident [12/7/05 Davis Spill]").

14 c. Thus, as of December 9, 2005, at the latest, HVI-CC was  
15 required to prepare and submit to EPA a FRP for the Zaca Facility within six  
16 months, i.e., no later than June 9, 2006. See 40 C.F.R. § 112.20(a)(2)(iv)  
17 (owner/operator of facility that is required to prepare and submit FRP after August  
18 30, 1994, as a result of unplanned change in facility characteristics that renders  
19 facility subject to criteria in § 112.20(f)(1) shall submit a FRP to EPA Regional  
20 Administrator within six months of unplanned change).

21 d. Alternatively, as of the 12/7/05 Davis Spill of 2,135 barrels  
22 (89,670 gallons) of oil, the Zaca Facility had had a reportable discharge in an  
23 amount greater than or equal to 10,000 gallons within the last five years, and thus,  
24 as of December 7, 2005, HVI was required to prepare and submit to EPA a FRP  
25 for the Zaca Facility no later than June 7, 2006. As late as the 1/5/08 Davis Spill  
26 of 3,252 barrels (136,584 gallons), the Zaca Facility had had a reportable  
27 discharge in an amount greater than or equal to 10,000 gallons with the last five  
28 years.

1 e. HVI has never submitted a FRP to EPA for the Zaca Facility.  
2 Dkt. No. 345-2 (Reich Decl.) at ¶ 36.

3 f. As of November 6, 2013, the Zaca Facility's total oil storage  
4 capacity was less than 1 million gallons according to its SPCC Plan and thus the  
5 Zaca Facility was no longer subject to the FRP requirements. Dkt. No. 345-2  
6 (Reich Decl.) at ¶ 81. Absent specific and credible evidence to the contrary (such  
7 as a certified SPCC Plan attesting to a permanent change in facility design,  
8 construction, or operation that reduced the total oil storage capacity below 1  
9 million gallons), this Court finds that the Zaca Facility was no longer subject to  
10 the FRP requirements as of November 6, 2013.

11 g. The Court finds that the violation at the Zaca Facility began on  
12 June 10, 2006, and ended on November 6, 2013.

13 226. For purposes of calculating a civil penalty, and consistent with the  
14 United States' exercise of enforcement discretion (Dkt. No. 349-2 at Appendix A),  
15 the Court counts one day of violation per violation, occurring on the first date that  
16 HVI failed to submit the required FRP (July 14, 2005, for Bell and June 10, 2006,  
17 for Zaca), for a total of 2 days of violation.

## 18 VI. PENALTY FACTORS

19 *In determining the amount of a civil penalty under [Section 311 of the*  
20 *CWA] ... the court ... shall consider the seriousness of the violation or*  
21 *violations, the economic benefit to the violator, if any resulting from*  
22 *the violation, the degree of culpability involved, any other penalty for*  
23 *the same incident, any history of prior violations, the nature, extend,*  
24 *and degree of success of any efforts of the violator to minimize or*  
25 *mitigate the effects of the discharge, the economic impact of the*  
26 *penalty on the violator, and any other matters as justice may require.*

27 33 U.S.C. § 1321(b)(8).

### 28 A. Seriousness of the Violations



1           227.     The United States relied on the expert testimony of Mace Barron,  
2 Ph. D. and Yousif K. Kharaka, Ph. D., as well as the testimony of California  
3 Department of Fish and Wildlife responder Michael Connell, and California  
4 Department of Fish and Wildlife investigation reports, to establish the  
5 environmental harm caused by HVI's spills of oil and produced water at the Bell  
6 and Zaca Facilities. HVI offered no expert testimony to rebut Drs. Barron and  
7 Kharaka.

8           228.     Dr. Barron is an experienced ecological researcher and toxicologist,  
9 and in preparing his testimony he reviewed the incident, investigation and  
10 biological reports relating to HVI's oil spills, as well as scientific literature relevant  
11 to his opinions, and made several site visits. Dkt. No. 435-1 (Barron Decl.) at  
12 ¶¶ 1-4. Dr. Barron offered a qualitative assessment of the environmental injury  
13 caused by HVI's spills of a kind routinely prepared and considered by experts in  
14 the field of ecological risk assessment. Dkt. No. \_\_\_\_ at 77:11-15 (10/22/18 Trial  
15 Tr. Vol II, Test. of Barron).<sup>4</sup> The expert testimony Dr. Barron offered in this case  
16 is credible.

17           229.     Dr. Kharaka is an experienced hydrogeochemist with  
18 approximately 50 years' experience researching the interactions of water,  
19 petroleum, and rocks in subsurface and contaminated field sites. Dkt. No. 345-13  
20 (Kharaka Decl.) at ¶¶ 2-3. In preparing his testimony, Dr. Kharaka reviewed  
21 relevant scientific literature and reports on HVI's oil spills, and conducted two site  
22 visits. Id. ¶ 4. The expert testimony Dr. Kharaka offered in this case is credible.

23           230.     Michael Connell has served as a Senior Environmental Scientist  
24 with the California Department of Fish and Wildlife since 2007, and has extensive  
25 experience in conducting responses to oil spills. Dkt. No. 434-6 (Connell Decl.) at  
26

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27 <sup>4</sup> The parties have received the October 22, 2008, Vol. II trial transcript, but no  
28 docket entry appears to have been created for this transcript. A copy of that  
transcript is attached hereto as Attachment B.

¶¶ 1-4. Mr. Connell was a State responder at the 7/16/07 Bell Spill, the 12/7/07 Bell Spill, the 1/5/08 Davis Spill, the 1/29/08 Bell Spill, and the 12/27/08 Spill. Id. The testimony Mr. Connell offered in this case is credible.

231. HVI's spills of crude oil and produced water at the Bell and Zaca Facilities, and the attendant cleanup activities, caused extensive environmental harm. Dkt. No. 435-1 (Barron Decl.) at ¶ 9 and Ex. A (Rpt.) at § 7; Dkt. No. \_\_\_\_ at 71:21–75:13 (10/22/18 Trial Tr. Vol II, Test. of Barron).

232. HVI's spills at its Bell and Zaca Facilities were made up of a mixture of crude oil and large quantities of produced water. Dkt. No. 345-13 (Kharka Decl.) at ¶ 5.

233. Crude oil is toxic to humans, plants, animals, and ecosystems. The physical injuries crude oil can cause to plant and animal life include smothering, destruction of the insulating capacity of animals' fur or feathers, and impairment of animals' ability to fly or swim. Crude oil can render soil unfit for plant life by reducing its ability to hold oxygen, and by acting as a barrier preventing water from being absorbed. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 5 and Ex. A (Rpt.) at 7; Dkt. No. 435-1 (Barron Decl.) at ¶ 6 and Ex. A (Rpt.) at § 6.3.

234. Crude oil can also cause biochemical injury to plants and animals because it contains chemicals that are poisonous, cancerous, mutagenic, and that harm the immune, brain, and nervous systems, the liver, and other organs. These chemicals include volatile organic compounds (such as benzene) and polycyclic aromatic hydrocarbons (such as benzo(a)pyrene). Id.

235. Produced water likewise contains constituents that can cause serious injury to animals, plants, and the environment. Recent samples of produced water from the Bell and Zaca Facilities show salinities of 7,000 to 19,000 mg/L TDS, 10 to 20 times higher than the threshold values for most plants. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 4 and Ex. A (Rpt.) at 8. Prior samples likewise show that HVI's produced water has salinities that reach 20% to 50% that of seawater,

1 and are 30 to over 100 times higher than normal fresh water. Dkt. No. 435-1  
2 (Barron Decl.) at ¶ 6 and Ex. A (Rpt.) at §§ 6.1, 6.4.

3 236. When salinity accumulates in soil it reduces both the rate of water  
4 absorption by plants and water availability in the soil, delaying plant growth and  
5 reducing yields. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 5 and Ex. A (Rpt.) at 8.  
6 Salinity alone can also be toxic to aquatic organisms – produced water can kill  
7 sensitive aquatic invertebrates even if it is diluted 99%. Dkt. No. 435-1 (Barron  
8 Decl.) at ¶ 6 and Ex. A (Rpt.) at § 6.3. Samples of HVI's produced water and spill  
9 water exceeded the U.S. National Water Quality Criteria of 860 mg/L for chloride  
10 for acute toxicity to aquatic life. Id. at ¶ 6 and Ex. A (Rpt.) at § 6.4.

11 237. In addition to high salinities, produced water samples from the Bell  
12 and Zaca Facilities also contained concentrations of boron, barium, and benzene  
13 that make the produced water toxic to humans, plants, animals, and the local  
14 ecosystem. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 5 and Ex. A (Rpt.) at 8-9, 11;  
15 Dkt. No. 435-1 (Barron Decl.) at Ex. A (Rpt.) at §§ 6.1 and 6.4.

16 238. The  
17 Bell and Zaca  
18 Facilities, and adjacent  
19 areas into which  
20 spilled crude oil and  
21 produced water were  
22 released, are located  
23 within the Central  
24 California Foothills  
25 and Coastal Mountains  
26 ecoregion, which  
27 provides habitat for a  
28



Deer grazing near Palmer Creek Road beside a pile of oiled soil excavated following the 7/16/07 Bell Spill. TREX US3140.

diversity of wildlife, includes insects, spiders, lizards, snakes, California quail,

1 doves, crows, ground squirrels, turkey vultures, song birds, red-tailed hawk, owls,  
2 mice, rabbits, squirrels, raccoon, skunk, deer, black bear, mountain lion, wild pig,  
3 American badgers, flycatchers, kestrels, road runners, wood rats, opossum, and  
4 coyote. Likely habitat uses include nesting, sheltering, breeding, foraging, use as a  
5 migration corridors, and intermittent use by aquatic-dependent organisms (during  
6 times when creeks and tributaries are flowing). Dkt. No. 435-1 (Barron Decl.) at  
7 ¶ 5 and Ex. A (Rpt.) at § 6.2.

8 239. The Bell and Zaca Facilities are within the potential range of  
9 aquatic and terrestrial habitat for the California tiger salamander (an endangered  
10 species) and the California red-legged frog (a threatened species), though it is  
11 unclear if they were directly harmed by HVI's spills. Dkt. No. 435-1 (Barron  
12 Decl.) at ¶¶ 5, 7, and Ex. A (Rpt.) at § 6.2.

13 240. Both Palmer Road Creek and Zaca Tributary provide habitat, food,  
14 shelter, and migration corridors for an array of reptiles, birds and mammals. Id. at  
15 ¶ 5 and Ex. A (Rpt.) at § 6.4.

16 241. HVI's spills of crude oil and produced water contaminated riparian  
17 habitats and multiple miles of stream channels in and around Palmer Road Creek  
18 and Zaca Tributary. Id. at ¶ 5 and Ex. A (Rpt.) at § 6.4 and App. D1.



28 Crude oil in Zaca Tributary following the 12/7/05 Bell Spill. TREX US0771.



Crude oil in Zaca Tributary following the 1/5/08 Davis Spill. TREX US0159.





Crude oil in Palmer Road Creek following the 12/7/07 Bell Spill. TREX US1075.



Crude oil in Palmer Road Creek following the 7/16/07 Bell Spill. TREX US1125 at DFG025195.

242. Responders observed a “near complete loss of biota” in the path of several of HVI’s spills. Dkt. No. 435-1 (Barron Decl.) at Ex. A (Rpt.) at § 6.4; TREX US1339 at DFG000973-74 (7/16/07 DFW Rpt.); TREX US0971 at DFG005060 (12/7/07 DFW Rpt.); TREX US3139 at DFG005599 (1/5/08 DFW Rpt.). Dead and oiled animals observed in the paths of HVI spills included insects, reptiles, birds, and mammals. Dkt. No. 435-1 (Barron Decl.) at ¶ 7; TREX US0771 at DFG0059778 (12/7/05 DFW Rpt.); TREX US0195 at EPA9\_0269236 ln 212-218 (1/5/08 DFW Rpt.); TREX US3093 at DFG000396 (12/27/08 DFW Report). Dead animals recovered following the 1/5/08 Davis Spill included a barn owl, red tailed hawk, striped skunk, black racer snake, and western fence lizard. TREX US0195 at EPA9\_0269236 ln 212-218 (1/5/08 DFW Report).

243. Additional animal deaths and poisonings likely occurred but went undiscovered because injured animals may have moved or been preyed upon after being oiled. Dkt. No. 435-1 (Barron Decl.) at Ex. A (Rpt.) at § 6.4.

1           244. On multiple occasions, responders noted that throughout the spill  
2 pathway, oil coated vegetation and  
3 woody debris, filled animal burrows  
4 and crevices, and covered the surface of  
5 rocks in and around the creek bed,  
6 while oil and produced water penetrated  
7 the streambed and banks of the stream.  
8 Dkt. No. 435-1 (Barron Decl.) at ¶ 6;  
9 TREX US1339 at DFG000973-74  
10 (7/16/07 DFW Rpt.); TREX US0971 at  
11 DFG005060 (12/7/07 DFW Rpt.);  
12 TREX US3139 at DFG005599 (1/5/08 DFW Rpt.).



Oil-coated Soil and vegetation following the 12/7/07 Bell Spill. TREX US0971 at DFG005066.

13           245. The cleanup efforts necessary as a result of HVI's spills caused  
14 further environmental injury, as heavily oiled vegetation, sediment, and soil had to  
15 be removed in order to effectively extract crude oil from the creek beds. Movement  
16 of response equipment and responders also caused injury to plant life – including  
17 important riparian species such as the coast live oak – and erosion of stream banks.  
18 Dkt. No. 435-1 (Barron Decl.) at Ex. A (Rpt.) at § 6.4 and App. D1; TREX  
19 US0771 at DFG005978 (12/7/05 DFW Rpt.); TREX US1339 at DFG000975  
20 (7/16/07 DFW Rpt.); TREX US0971 at DFG005059 (12/7/07 DFW Supp. Rpt.);  
21 TREX US3139 at DFG005599 (1/5/08 DFW Rpt.); TREX US3093 at DFG000396  
22 (12/27/08 DFW Rpt.).

23           246. Some quantity of residual crude oil, and a much larger amount of  
24 produced water, was inevitably left in affected habitats following cleanup efforts,  
25 where it likely continued to expose wildlife to the toxic constituents of crude oil  
26 and produced water for some time, and continued to degrade habitat by elevating  
27  
28



the salinity of soils, sediment, surface and subsurface water above normal levels. Dkt. No. 435-1 (Barron Decl.) at ¶ 8 and Ex. A (Rpt.) at § 6.4 and App. D1.



Backhoe and tractor removing oiled soil from Zaca Tributary following the 12/7/05 Davis Spill. TREX US0771 at DFG005973.

247. The DFW's estimated habitat recovery times following several of HVI's spills ranged from one to three years, indicating that environmental harms persisted long after remediation efforts were completed. Dkt. No. 435-1 (Barron Decl.) at ¶ 8; TREX US1273 at DFG003948 (8/11/05 DFW Rpt.); TREX US0971 at DFG005980 (12/7/05 DFW Rpt.); TREX US1339 at DFG000977 (7/16/07 DFW Rpt.); Dkt. No. 434-6 (Connell Decl.) at ¶¶ 52 (1/5/08 Davis Spill), 58 (1/29/08 Bell Spill), and 63 (12/27/08 Bell Spill).

248. Produced water from HVI's spills may also have caused lasting groundwater contamination. There are porous and permeable alluvium and terrace deposits along both Cat Canyon Creek and Zaca Tributary that would have allowed produced water to enter into the sandy-gravelly upper layers of soil in the unsaturated zone, and from there spread both laterally and down the creeks. Some produced water could have passed through the unsaturated zone, reaching and contaminating groundwater. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 6 and Ex. A

(Rpt.) at 10. Dr. Kharaka estimated that roughly 50% of the produced water spilled by HVI ultimately reached groundwater in this fashion. Dkt. No. \_\_\_\_ at 98:8-14. (10/22/18 Trial Tr. Vol II, Test. of Kharaka).

249. Groundwater contaminated with produced water is very difficult and expensive to remediate, with natural attenuation and even human intervention requiring decades or more. Dkt. No. 345-13 (Kharaka Decl.) at ¶ 7 and Ex. A (Rpt.) at 11.

250. Taken together, the above findings demonstrate that the crude oil and produced water spills at HVI's Bell and Zaca Facilities caused extensive environmental harm.

#### **B. Economic Benefit Resulting from the Violations**

251. The United States relied on the expert testimony of Dr. Joan K. Meyer and Mr. Kinworthy regarding HVI's economic benefit resulting from its violations of the CWA. HVI offered no expert testimony to rebut Dr. Meyer or Mr. Kinworthy on the economic benefit resulting from its violations, or as to the appropriate methodology for calculating that benefit.

252. Dr. Meyer is an economist and financial analyst with extensive experience in economic benefit calculation in environmental non-compliance cases. Dkt. No. 423-1 (Meyer Decl.) at ¶¶ 4-5 and Ex. A (Economic Benefit Rpt.) at 1. In preparing her testimony, Dr. Meyer relied on her experience, on publicly available financial data, and on inputs provided by expert witness Mr. Kinworthy. Dr. Meyer's testimony as reflected in her declaration and expert report is credible.

253. As set forth above, Mr. Kinworthy has dozens of years of experience as an environmental manager and environmental compliance consultant in the oil and gas industry. Dkt. No. 345-11 (Kinworthy Decl.) at ¶¶ 8-14. Using his own experience in providing services to the oil and gas industry, as well as cost information provided by companies in Santa Barbara County, Mr. Kinworthy estimated the costs that HVI was able to avoid or delay by not meeting regulatory

1 requirements and by not implementing spill prevention programs that met industry  
2 standards and estimated whether and when these costs were incurred. Dkt. No.  
3 345-11 (Kinworthy Decl.) at ¶¶ 32–41 and Ex. A (Rpt.) at 37–50 and App. D. The  
4 testimony Mr. Kinworthy offers on these subjects is credible.

5       254. Dr. Meyer credibly concludes, using the inputs provided by Mr.  
6 Kinworthy, that HVI saved at least \$6,317,199 by delaying or avoiding  
7 expenditures to prevent oil spills and/or to meet obligations under environmental  
8 regulations. Dkt. No. 423-1 (Meyer Decl.) at ¶ 7.

9       255. Dr. Meyer’s assessment of economic benefit is based on a  
10 discounted cash flow model that compares cash flows HVI would have spent had it  
11 fully complied with the law in a timely fashion (a “full compliance” scenario) with  
12 cash flows from an “actual” scenario (in which HVI delayed or avoided some  
13 compliance costs). The difference between the actual scenario and the full  
14 compliance scenario represents the economic benefit realized by HVI. This  
15 discounted cash flow methodology is widely accepted in the financial field, and  
16 was appropriately applied in this case by Dr. Meyer. *Id.* at ¶¶ 11, 18.

17       256. Dr. Meyer’s assessment of economic benefit appropriately  
18 considered both costs that were avoided (e.g. the cost of developing a compliant  
19 SPCC plan for the U-Cal Facility, which was never incurred because HVI sold the  
20 U-Cal Facility without incurring this cost) and costs that were delayed (e.g. the  
21 cost of identifying and marking flowlines at the Bell Facility, which should have  
22 been incurred in 1999 but was not incurred until 2010). *Id.* at ¶¶ 8–10 and Ex. A  
23 (Economic Benefit Rpt.) at 3–4.

24       257. Dr. Meyer’s assessment of economic benefit used a conservative  
25 and reasonable 40.75% combined federal and state marginal tax rate, and a seven  
26 year depreciation schedule for depreciable assets, to consider the state and federal  
27 tax implications of money saved that should have been spent on compliance. *Id.* at  
28 ¶ 16 and Ex. A (Economic Benefit Rpt.) at 6–7.

258. Dr. Meyer’s assessment of economic benefit reasonably used the annual weighted average costs of capital (“WACC”) for HVI set forth in Exhibit 2 of Dr. Meyer’s Economic Benefit Report, based on published industry-level data for the crude petroleum and natural gas industry, to calculate HVI’s economic benefit in net present value terms (i.e. taking into account the time value of money). *Id.* at ¶¶ 16–17 and Ex. A (Economic Benefit Rpt.) at 7–10.

259. Dr. Meyer’s assessment of economic benefit is based on the 87 items identified in the tables in the following 10 paragraphs, ranging from identification and integrity testing of flowlines, to installation and repair of secondary spill containment, to drafting of SPCC plans, all of which HVI should have addressed to comply with regulatory requirements and prevent oil spills at its facilities, but which it either delayed or avoided entirely. Mr. Kinworthy offered credible estimates as to the dates of non-compliance and approximate costs delayed or avoided for each of these items, which are also set forth below. Dkt. No. 345-11 (Kinworthy Decl.) at ¶¶ 32–41 and Ex. A (Rpt.) at 37–50 and App. D.

260. Identification of Active and Idle Flowlines. HVI failed to identify the location of all active and inactive flowlines at its facilities, a necessary step for HVI to create a flow line maintenance program. HVI thereby delayed (and in the case of the U-Cal and Williams B Facilities, avoided) identification costs of \$250 per flow line.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Battles	November 1999	8/1/2010	\$14,250 (57 lines)
Bell	November 1999	8/1/2010	\$33,500 (134 lines)
Casmalia	November 1999	8/1/2010	\$20,750 (83 lines)
Zaca (Chamberlin Lease)	August 2002	8/1/2010	\$1,750 (7 lines)
Zaca (Davis Lease)	August 2002	8/1/2010	\$19,000 (76 lines)

Escolle	November 1999	8/1/2010	\$7,500 (30 lines)
Lakeview	August 2002	8/1/2010	\$38,250 (153 lines)
Lloyd	August 2002	8/1/2010	\$2,000 (8 lines)
Los Flores	August 2002	8/1/2010	\$7,750 (31 lines)
Security	August 2002	8/1/2010	\$23,000 (92 lines)
U-Cal	August 2002	1/1/2009 (date of sale)	\$31,500 (126 lines)
Williams B	June 2000	2/25/2010 (date of sale)	\$15,000 (60 lines)

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

261. Scheduled Pressure Testing for Flowlines Outside Environmentally Sensitive Areas. HVI failed to conduct pressure testing on active flowlines not located in environmentally sensitive areas within its facilities every five years, thereby avoiding testing costs of \$2,500 per line each time a test should have been completed and was not.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Avoided</i>
Battles	November 1999	2/22/2010	\$57,500 every five years (23 lines)
Bell	November 1999	1/11/2010	\$212,500 every five years (85 lines)
Casmalia	November 1999	7/18/2011	\$87,500 every five years (35 lines)
Zaca (Chamberlin Lease)	August 2002	2/17/2011	\$17,500 every five years (seven lines)
Zaca (Davis Lease)	August 2002	3/9/2011	\$70,000 every five years (28 lines)
Escolle	November 1999	3/23/2010	\$27,500 every five years (11 lines)
Los Flores	August 2002	5/20/2010	\$32,500 every five years (13 lines)
Security	August 2002	6/10/2009	\$82,500 every five years (33 lines)

U-Cal	August 2002	1/1/2009 (date of sale)	\$102,500 every five years (41 lines)
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Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

262. Scheduled Pressure Testing for Flowlines in Environmentally Sensitive Areas. HVI failed to conduct pressure testing on active flowlines located in environmentally sensitive areas within its facilities every two years, thereby avoiding testing costs of \$2,500 per line each time a test should have been completed and was not.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Avoided</i>
Battles	November 1999	2/22/2010	\$7,500 every two years (three lines in ESAs)
Casmalia	November 1999	7/18/2011	\$2,500 every two years (one line in ESA)
Zaca (Davis Lease)	August 2002	3/9/2011	\$5,000 every two years (two lines in ESAs).
Williams B	June 2000	2/25/2010 (date of sale)	\$100,000 every two years (40 lines in ESAs)

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

263. Post-spill Flowline Pressure Testing. HVI failed to conduct pressure testing on flowlines at the Bell Facility from which there had been spills on seven separate occasions, thereby avoiding testing costs of \$2,500 each time a test should have been completed and was not.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Avoided</i>
Bell	6/8/2005	n/a	\$2,500



Bell	7/13/2005	n/a	\$2,500
Bell	8/11/2005	n/a	\$2,500
Bell	7/16/2007	n/a	\$2,500
Bell	1/29/2008	n/a	\$2,500
Bell	5/1/2009	n/a	\$2,500
Bell	10/14/2010	n/a	\$2,500

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 39-40 and App. D.

264. Construction and Repair of Secondary Containment. At many of its facilities, HVI failed to construct necessary secondary containment, or to promptly repair compromised secondary containment, thereby delaying (and in the case of the U-Cal Facility, avoiding) these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Battles	November 1999	3/12/2008	\$1,200
Bell	November 1999	2/29/2008	\$1,200
Bell (Blochman Ponds)	12/7/2007	1/7/2008	\$4,000
Casmalia (tank battery)	November 1999	3/12/2008	\$1,200
Casmalia (wastewater pond)	November 1999	3/12/2008	\$1,200
Zaca (Chamberlin Lease)	August 2002	2/5/2008	\$1,200
Zaca (Davis Lease)	August 2002	5/30/2008	\$1,200
Escolle	2/12/2008	3/12/2008	\$1,200
Lakeview	August 2002	6/29/2007	\$1,200
Lakeview (construction)	August 2002	6/29/2007	\$2,000
Lloyd	August 2002	6/29/2007	\$1,200
Los Flores	August 2002	6/29/2007	\$1,200
Security	August 2002	3/12/2008	\$1,200

U-Cal (Item 9)	10/25/2005	1/1/2009 (date of sale)	\$1,200
U-Cal (Item 5)	August 2002	1/1/2009 (date of sale)	\$1,200
U-Cal (Item 10)	2/12/2008	1/1/2009 (date of sale)	\$2,000
Williams B	June 2000	3/19/2008	\$2,000

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

265. Containment for Truck Loading/Unloading Racks. At a number of facilities, HVI failed to construct adequate containment to prevent oil from flex hoses from spilling on the ground, thereby delaying (and in the case of the U-Cal Facility, avoiding) these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Battles	November 1999	n/a	\$1,200
Bell	November 1999	n/a	\$1,200
Zaca (Chamberlin Lease)	August 2002	n/a	\$1,200
Zaca (Davis Lease)	August 2002	n/a	\$1,200
Los Flores	August 2002	n/a	\$1,200
Security	August 2002	n/a	\$1,200
U-Cal	August 2002	1/1/2009 (date of sale)	\$1,200

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-49 and App. D.

266. Secondary Containment for Kerosene Distillate Tanks. HVI failed to include the necessary impermeable clay liner in the secondary containment for kerosene distillate tanks at the Security and U-Cal and Facilities, thereby delaying (and in the case of U-Cal, avoiding) these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Security	August 2002	n/a	\$10,000
U-Cal	1/3/2005	1/1/2009 (date of sale)	\$1,000

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 48-49 and App. D.

267. Tank Level Alarm System Testing. HVI should have hired a certified, third-party inspector each year to test the alarm systems and sensors on its tanks and ensure their proper function, but did not, thereby avoiding these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Avoided</i>
Battles	November 1999	n/a	\$1,200/year
Bell	November 1999	n/a	\$1,200/year
Casmalia	November 1999	n/a	\$1,200/year
Zaca (Chamberlin Lease)	August 2002	n/a	\$1,200/year
Zaca (Davis Lease)	August 2002	n/a	\$1,200/year
Escolle	November 1999	n/a	\$1,200/year
Los Flores	August 2002	n/a	\$1,200/year
Security	August 2002	n/a	\$1,200/year
U-Cal	August 2002	1/1/2009 (date of sale)	\$1,200/year
Williams B	June 2000	2/25/2010 (date of sale)	\$1,200/year

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

In addition, following repairs to alarm systems at the Zaca Facility's Davis Tank Battery after malfunctions that caused or contributed to oil spills, HVI should have conducted an additional, confirmatory inspection to ensure that the alarms were properly repaired and fully functional, but did not, avoiding these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Avoided</i>
Zaca (Davis Lease)	12/7/2005	n/a	\$1200
Zaca (Davis Lease)	1/5/2008	n/a	\$1200

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 43 and App. D.

268. Decommissioning Out-of-Service Tanks. In several instances, HVI either continued using degraded tanks that should have been decommissioned and replaced, or listed tanks as out of service but failed to properly decommission them by draining all liquids and removing hatches. HVI thereby delayed (and in the case of the U-Cal Facility, avoided) these decommissioning costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Battles	1/12/2005	1/1/2004	\$1,500
Lakeview	August 2002	4/27/2007	\$1,500
Lloyd	August 2002	4/27/2007	\$1,500
Los Flores	August 2002	4/27/2007	\$1,500
Security	August 2002	3/12/2008	\$1,500
U-Cal	10/25/2005	1/1/2009 (date of sale)	\$1,500

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-49 and App. D.

269. Deficient SPCC Plans. HVI failed to complete an adequate SPCC Plan upon its acquisition of each oil production facility listed below. The end date of economic benefit reflects the date by which HVI had incurred the cost or bulk of the cost of preparing a compliant SPCC Plan (even if the Plan was not fully compliant in fact), or in the case of the U-Cal and Williams B Facilities, the date that HVI sold the facility and could thus no longer be expected to complete an SPCC Plan. HVI thereby delayed (and in the case of U-Cal and Williams B, avoided) these costs.

<i>Facility</i>	<i>Start Date of Economic Benefit</i>	<i>End Date of Economic Benefit</i>	<i>Cost Delayed/Avoided</i>
Battles	November 1999	5/5/2011	\$5,000
Bell	November 1999	4/7/2011	\$5,000
Casmalia	November 1999	4/7/2011	\$5,000
Zaca (Davis/ Chamberlin Leases)	August 2002	4/7/2011	\$5,000
Escolle	November 1999	4/7/2011	\$5,000
Lakeview	August 2002	6/29/2007	\$5,000
Lloyd	August 2002	1/28/2011	\$5,000
Los Flores	August 2002	4/8/2011	\$5,000
Security	August 2002	1/28/2011	\$5,000
U-Cal	August 2002	1/1/2009 (date of sale)	\$5,000
Williams B	June 2000	2/25/2010 (date of sale)	\$5,000

Source: Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 37-50 and App. D.

270. Mr. Kinworthy's cost estimates as set forth above were expressed in 2002 dollars, which were appropriately adjusted for inflation by Dr. Meyer using the Chemical Engineering Plant Cost Index. Dkt. No. 423-1 (Meyer Decl.) at Ex. A (Economic Benefit Rpt.) at 5–6.

271. Applying the discounted cash flow methodology and reasonable assumptions described above to these findings, Dr. Meyer reasonably opined and this Court concludes that HVI's economic benefit as a result of the violations in this case was at least \$6,317,199.

272. The amount of economic benefit is not reduced by expenditures on futile or ineffective compliance efforts, because such expenditures do not actually achieve compliance with regulatory requirements and industry-standard spill prevention measures.

1           273.     The amount of economic benefit is also not reduced by costs  
2 incurred, or lost revenue recorded, as a result of spill responses that were legally  
3 required and were necessitated by HVI's violations of the law.

4           **C. Culpability**

5           274.     The findings of fact set forth above regarding HVI's gross  
6 negligence and willful misconduct, including its long history of violations, failure  
7 to address known noncompliance, and repeated oil spills, demonstrate HVI's  
8 culpability for the twelve spills and regulatory violations in this case.

9           **D. Other Penalties for Same Incidents**

10          275.     HVI was assessed a civil penalty of \$5,000 by the California  
11 Department of Conservation's Division of Oil, Gas & Geothermal Resources in  
12 connection with the 12/27/08 Bell Spill. TREX US0662 (DOGGR Penalty Order).

13          276.     In this litigation, the State is seeking its own penalties under State  
14 law for the following spills for which the United States also seeks penalties under  
15 federal law:

- 16               a. 7/16/07 Bell Spill (CA Claims 1 and 8);  
17               b. 12/7/07 Davis Spill (CA Claims 2 and 9);  
18               c. 1/5/08 Davis Spill (CA Claims 3 and 10);  
19               d. 1/29/08 Bell Spill (CA Claims 4 and 15);  
20               e. 12/27/08 Bell Spill (CA Claim 16);  
21               f. 5/1/09 Bell Spill (CA Claim 17); and  
22               g. 10/14/10 Bell Spill (CA Claim 18).

23          Dkt. No. 442 at ¶ 7.a, California Claims (Final Pretrial Conf. Order).

24          277.     The State is not seeking penalties for the 6/8/05 Bell Spill, the  
25 7/13/05 Bell Spill, the 8/11/05 Bell Spill, the 12/7/05 Davis Spill, or the 12/21/10  
26 Bell Spill. Id.

27          278.     HVI has otherwise not paid any relevant penalties for the violations  
28 at issue here.



**E. History of Prior Violations**

279. The twelve oil spills and numerous SPCC violations addressed above show an ongoing pattern of Clean Water Act violations by HVI at its oil production facilities from at least 2005 through 2010.

**F. Efforts to Minimize or Mitigate Discharges**

280. HVI's efforts to minimize or mitigate discharges resulting from its oil spills were in many cases flawed.

281. HVI responded to a number of spills inappropriately, hampering cleanup efforts or causing additional environmental harm:

a. On the first day of response to the 12/7/05 Bell Spill, HVI personnel working at the direction of HVI's Environmental Manager used hot produced water to dislodge crude oil from the Zaca Tributary streambed. Dkt. No. 414 (Curtis Decl.) at ¶ 14. As discussed above, produced water contains petroleum hydrocarbons and is itself toxic.

b. In its response to the 12/7/05 Bell Spill, HVI repeatedly mishandled contaminated soils and as a result spread oil to uncontaminated areas and areas that had already been cleaned. Dkt. No. 434-3 (Dostal Decl.) ¶¶ 71, 73; TREX US0775 at HVI000281 (Dostal DFW Rpt.).

c. For the 7/16/07 Bell Spill, HVI's initial attempts to clamp the corroded pipeline failed, and it continued to leak oil for three days after the spill was discovered. TREX US1394 at DFG001068 ln 25-29 (DFW Investigation Rpt.).

d. Following the 7/16/07 Bell Spill, HVI's inadequate response and cleanup methods, including significant understaffing and failure to provide sufficient haz-mat bins, complicated the cleanup and caused delay that made the spilled oil harder to remove from the creek. Dkt. No. 434-6 (Connell Decl.) ¶¶ 24-25; Dkt. No. 434-4 (Gross Decl.) ¶¶ 14-15.

e. For the 12/7/07 Bell Spill, HVI once again substantially understaffed the cleanup effort. HVI also failed to remove all spilled oil as directed

1 by the State, resulting in recontamination of Palmer Road Creek during a heavy  
2 rain. Dkt. No. 434-3 (Dostal Decl.) ¶ 26.

3 f. Following the 1/5/08 Davis Spill, HVI failed to construct an  
4 adequate temporary berm to contain the spilled oil in light of forecasted rain, and  
5 failed to improve the berm despite instruction from responders to do so, and rain  
6 then pushed oil more than a mile further downstream from the temporary berm.  
7 Dkt. No. 434-6 (Connell Decl.) at ¶¶ 45, 48-49.

8 g. For the 1/29/08 Bell Spill, HVI failed to install pumps at a  
9 temporary dam prior to heavy rains as it had agreed to do, and the dam was  
10 breached and oil was carried further downstream, necessitating additional cleanup.  
11 Dkt. No. 345-10 (Wise Decl.) ¶ 56.

12 h. For the 1/29/08 Spill, HVI changed contractors during the  
13 course of the cleanup, leading to delays and an eventual EPA takeover of the  
14 cleanup work. Dkt. No. 345-10 (Wise Decl.) ¶¶ 59-61.

15 i. Following the EPA takeover of the 1/29/08 Spill cleanup, the  
16 EPA response team determined that HVI personnel had covered spilled oil with  
17 soil rather than cleaning it up. Dkt. No. 345-10 (Wise Decl.) ¶ 61.

18 282. HVI also repeatedly failed to provide proper safety equipment and  
19 necessary training to its staff charged with responding to oil spills. In addition to  
20 placing employees at unnecessary risk, these practices illustrate a more general  
21 failure to prepare for spill response, and lead to delays as in several cases EPA  
22 took over cleanups after worker safety concerns were not addressed:

23 a. During the response to the 12/7/05 Bell Spill, HVI failed to  
24 comply with worker safety regulations that apply to oil spill cleanups under the  
25 National Contingency Plan – known as “HAZWOPER” regulations – as workers  
26 were not provided with necessary protective clothing and mandatory air quality  
27 monitoring was not conducted. TREX US0870 at HVI010764-68 (DFW Oggel  
28 Rpt.).

1           b.       During the response to the 12/7/05 Bell Spill, HVI repeatedly  
2 misrepresented to regulators that all workers conducting the cleanup had  
3 HAZWOPER training, and when called upon to substantiate its claims it could not  
4 do so. Dkt. No. 434-3 (Dostal Decl.) ¶¶ 68, 70; Dkt. No. 345-10 (Wise Decl.)  
5 ¶¶ 16, 21. EPA ultimately assumed control of the spill response after HVI failed to  
6 adequately address its noncompliance with HAZWOPER requirements. Dkt. No.  
7 345-10 (Wise Decl.) ¶ 21.

8           c.       During the 7/16/07 Bell Spill, HVI again failed to comply with  
9 HAZWOPER safety requirements including protective air monitoring and creation  
10 of a written health and safety program. Dkt. No. 434-4 (Gross Decl.) ¶¶ 13-14.  
11 After HVI continued to fail to produce a written health and safety program, EPA  
12 ordered HVI to stop work, and advised HVI that if it did not hire a competent  
13 contractor to complete the cleanup, EPA would take over the response. Dkt. No.  
14 345-10 (Wise Decl.) ¶ 32.

15           d.       During the 12/7/07 Bell Spill response, the first HVI employee  
16 to learn of the spill told a State responder that he had no emergency response  
17 training, and appeared unfamiliar with spill reporting requirements. Dkt. No 434-3  
18 (Dostal Decl.) ¶ 26.

19       283.       Prompt reporting of spills is important because it allows State and  
20 federal responders to assess the spills and cleanup efforts, and to assist as  
21 necessary with mitigation efforts. Yet HVI repeatedly waited more than two hours  
22 after first learning of spills to report them:

23           a.       HVI waited more than two hours after learning of the 12/7/05  
24 Davis Spill to report to the California Office of Emergency Services (“OES”) and  
25 the federal National Response Center (“NRC”). TREX US0723 at HVI00996  
26 ¶¶ 10, 10.b (EPA Spill Questionnaire).  
27  
28

1           b.     HVI waited two and a half hours after learning of the 7/16/07  
2 Bell Spill to notify OES. TREX US1394 at DFG001069 ln 58-67 (DFW  
3 Investigation Rpt.).

4           c.     HVI waited approximately three hours after learning of the  
5 12/7/07 Bell Spill to report it to OES and the NRC. TREX US0970 at DFG000557  
6 ln 20-22 (DFW Investigation Rpt.).

7           284.    As Joshua Curtis, an Environmental Scientist with the State with  
8 extensive oil spill response experience, observed of his dealings with HVI  
9 following several of the spills at issue in this case:

10  
11           HVI demonstrated dramatically substandard performance on responding to  
12 and cleaning up of the oil it spilled [during the 12/7/05 Davis Spill, the  
13 7/16/07 Bell Spill, and the 1/5/08 Davis Spill]. HVI showed a level of  
14 recalcitrance in initiating, staffing, and responding to their spills that  
bordered on obstructionist.

15 Dkt. No. 414 (Curtis Decl.) ¶ 31.

#### 16           **G. Economic Impact of the Penalty on the Violator**

17           285.    In a joint stipulation entered as an order of this Court before trial,  
18 HVI elected to abandon its argument that the civil penalties Plaintiffs seek in this  
19 case should be reduced as a result of any economic impact such penalties would  
20 have on HVI, and on that basis the parties mutually agreed to withdraw and not to  
21 offer into evidence all related testimony and documentary evidence. Dkt. No. 443  
(Order Re: Economic Impact of Penalties on the Violator).

22           286.    Accordingly, there is no evidence before the Court that could  
23 support reduction of penalties based on their potential economic impact on HVI.

#### 24           **H. Other Matters as Justice May Require**

25           287.    There are no relevant facts other than those discussed above that  
26 would support reduction of the penalty HVI faces for the twelve oil spills.  
27  
28

**VII. FACTS SUPPORTING IMPOSITION OF INJUNCTIVE RELIEF TO PREVENT FURTHER CLEAN WATER ACT VIOLATIONS**

*The Administrator is authorized to commence a civil action for appropriate relief, including a permanent or temporary injunction [against persons in violation of Section 301 of the CWA, 33 U.S.C. § 1311] .... [The] court shall have jurisdiction to restrain such violation and to require compliance.*

33 U.S.C. § 1319(b).

288. The injunctive relief described in Appendix A of the United States' Proposed Conclusions of Law, Dkt. No. 473 ("Injunctive Relief"), is necessary to prevent or minimize future spills and regulatory violations and to ensure HVI's ongoing compliance with the law.

289. In ordering HVI to undertake the Injunctive Relief, the Court is ordering long-delayed improvements and upgrades to HVI's operations and facilities in terms of HVI's pipeline management program, containment and alarms, SPCC and spill-response training, and record-keeping and reporting that are necessary under the circumstances for HVI to comply with the law. The Court is also ordering reporting, certification, and third-party verification obligations necessary to ensure HVI's compliance.

290. Many of the causes and contributing factors underlying and exacerbating the spills and regulatory violations at the 11 Facilities were preventable and within HVI's control. HVI demonstrated a companywide failure spanning across its facilities to invest the money, resources, and diligence needed at all levels of operation, from field inspections to managerial decisions, to *prevent* rather than merely react to spills and regulatory violations, or to heed repeated notices from the government. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 26–27 and 35–36 (company culture and employee performance below good oil field industry practices).

1           291.     HVI's poor compliance record is not an inevitable result of the age  
2 of its facilities, as its performance is considerably worse than other comparable oil  
3 producers. Id. at Ex. A (Rpt.) at 28 (comparing spill history of HVI to BreitBurn  
4 Oil and Gas in similar timeframe and with similarly aged oil fields); TREX  
5 HVI0013 at 6 (Santa Barbara County report noting that between 2003 and 2007,  
6 HVI was "responsible for more oilfield releases than all of the other companies [in  
7 the county] combined").

8           292.     As described in Section III supra, the 12 spills were the result of  
9 HVI's gross negligence or willful misconduct. Causal and contributing factors  
10 extended across HVI's operations and demonstrated a pervasive companywide  
11 inability or unwillingness to meet environmental obligations: substandard pipeline  
12 (flowline) maintenance and inspection, equipment failure/improper use of  
13 equipment, inadequate monitoring for spills, inadequate secondary containment  
14 and diversionary structures, deficient SPCC Plans, and ineffectual spill prevention  
15 training and procedures. These failures did not end with the last spill alleged in this  
16 case (10/14/10 Bell Spill). Based on the number of spill reports (minus report  
17 updates) to the California Office of Emergency Services (OES), HVI has  
18 experienced at least 40 more spills after 10/14/10. TREX US3241 at 11–13. Thus  
19 HVI continues to experience spills, including as a result of flowline failures. Dkt.  
20 No. 345-2 (Reich Decl.) at ¶ 82 (at least 11 releases of oil in 2017 and 2018, most  
21 of which were from flowlines).

22           293.     HVI remains out of compliance today, as shown by regulatory  
23 violations that continued past 2010, by observations made in 2014 and 2016 by  
24 Michael Kinworthy and Peter Reich, and by HVI's own descriptions of its current  
25 practices. Specific areas of ongoing non-compliance, and appropriate injunctive  
26 relief to remedy that non-compliance, are described in more detail in the following  
27 paragraphs.  
28



**A. Specific Areas of Continuing Non-compliance**

294. HVI has numerous pipelines at its facilities that are decades old and that it has never used, many of which remain unidentified, have not been permanently closed by ensuring that they are drained and cut and capped on both ends, and have been the source of spills. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 27–30 (discussing age of facilities and the need for improved flowline management and describing Harlan Felt determination that approximately 40% of volume of HVI spills was due to flowlines). Yet even now, HVI’s procedures call for mapping of only “active” flowlines. Dkt. 361-2 (Dimitrijevic Decl.) at ¶ 65. Flowlines that are inactive but not “permanently closed” within the meaning of SPCC regulations have not been assessed, Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 30, and are not included in HVI’s flowline maintenance program, Dkt. No. 345-2 (Reich Decl.) at ¶¶ 71(a) (Bell inspection) and 78(a) (Zaca inspection).

295. HVI continues to rely on drive-by visual inspections of its flowlines, which are ineffective for portions of lines that are buried, partially buried, in contact with soil, or traversing inaccessible hillsides or through thick brush, because they are not in fact visible for inspection. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 71(a) (Bell inspection) and 78(a) (Zaca inspection). Drive-by inspections are also an impractical way to identify pitting, corrosion, and other damage because “[y]ou’re not going real fast, but you’re making sure you stay on the road and not go off a ditch or off a hill” and “in most of the Greka facilities, they have multiple flowlines right next to the road and in some cases, there may be five or six of them.” Dkt. No. \_\_\_\_ at 49:8-50:6 (10/23/18 Trial Tr. Vol. II, Test. of Kinworthy); see Dkt. No. 345-2 (Reich Decl.) at ¶ 85 (extremely difficult to spot corrosion from a vehicle).

296. In 2010, HVI finally developed a written Pipeline Integrity Management Plan, and now has some procedures for regular inspections of

1 flowlines and other infrastructure. But HVI still has not achieved full compliance.  
2 HVI's flowline maintenance program remains noncompliant and below industry  
3 standards, with only active lines mapped. And even with the active lines mapped,  
4 HVI's field operators cannot always readily locate them, Dkt. No. 345-11  
5 (Kinworthy Decl.) at Ex. A (Rpt.) at 29 (field operator could not identify which  
6 flowline was active until he walked a number of yards upstream to a gauge).

7         297. Moreover, HVI's flowline maintenance program only provides for  
8 flowlines to be tested at the minimum frequency required under DOGGR  
9 regulations, despite their advanced age, history of spills, years of operation without  
10 corrosion controls, and despite most lines not being on supports or racks even  
11 though contact with vegetation or soil increases the risk of external corrosion and  
12 makes visual inspection difficult. Id. at Ex A (Rpt.) at 33, 35. HVI's President  
13 testified that HVI now voluntarily pressure tests all active flowlines that are not in  
14 environmentally sensitive areas every five years, Dkt. No. 361-2 (Dimitrijevic  
15 Decl.) at ¶ 77, although it produced no corresponding pressure test records in  
16 litigation. While HVI is now apparently operating in accord with Mr. Kinworthy's  
17 recommendation that such flowlines be pressure tested on a five year cycle, Dkt.  
18 No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 35, absent an injunction HVI  
19 could reduce the frequency of those tests at any time.

20         298. HVI also persists in its failure to fully implement its own written  
21 spill prevention procedures. For example, the PMP contains procedures for  
22 marking pipelines to indicate the fluids carried, the direction of flow, line name,  
23 and other pertinent information, TREX US2762 at HVI021098, and to promptly  
24 remove accumulations of oil, id. at HVI021099. According to HVI's President, the  
25 company also has procedures for visual inspections of aboveground lines and the  
26 lease area, which should be documented in Daily Production reports and Weekly  
27 Lease Inspection Reports, Dkt. No. 361-2 (Dimitrijevic Decl.) at ¶¶ 29-31 (citing  
28 examples at TREX US1318 and pages 26-28 of TREX US2839), 55-57, 60-61, and

69-72 (describing inspections and use of reports). Yet despite the PMP and the purported daily and weekly inspections, many flowlines are not marked and field operators do not adequately identify and clean up obvious accumulations of oil.

299. HVI also leaves out-of-service pipelines in place rather than cleaning them of oil and sealing them, Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 32, and continues to exclude an out-of-service (but not permanently closed) 5,000-barrel tank from the Bell Facility's total oil storage capacity to avoid preparing a Facility Response Plan, Dkt. No. 361-2 (Dimitrijevic Decl.) at ¶ 37, despite the tank still containing oil, Dkt. No. 345-2 (Reich Decl.) at ¶ 71(e). These examples highlight HVI's still-insufficient flowline maintenance program and poor employee training on and implementation of spill prevention procedures.

300. HVI also continues to use many of the same procedures that failed to identify SPCC deficiencies, corrosion, breaches in secondary containment, and other causal and contributing factors in the spills at issue in this case—as evidenced in its current reliance on the same Daily Production reports (TREX US1318) and Weekly Lease Inspection Reports (TREX US2839 at pages 26-28) that it was using in 2005 and 2007.

301. HVI continues to demonstrate non-compliance in other important areas as well. For example, in 2016 the Bell Facility still did not have sufficient drainage controls or containment at the truck transfer area at Pit #2, Dkt. No. 345-2 (Reich Decl.) at ¶ 71(b), the Bell SPCC Plan did not outline procedures for transfers of oil between trucks and tanks, *id.* at ¶ 71(c), and the Bell Facility had accumulations of oil throughout, including oil from an “out of service” but not permanently closed wash tank, *id.* at ¶ 71(e). It also still lacked a Facility Response Plan. *Id.* at ¶ 73. The Zaca Facility likewise had accumulations of oil throughout. *Id.* at ¶ 78(b). Accumulations of oil were also present in 2014 at the Lloyd, Security, and Los Flores Facilities. Dkt. No. 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 23-24. Secondary containment at the Casmalia and Battles Facilities was

1 also visibly compromised. Id. at Ex. A (Rpt.) at 21-22. The truck-loading area at  
2 the Battles Facility continues to lack containment. Id. at Ex. A (Rpt.) at 38 (Battles  
3 item #5).

4 **B. Necessity for Injunctive Relief**

5 302. Absent permanent changes in HVI's operations, future violations  
6 and environmental injury are likely to occur at its facilities. Dkt. No. 345-2 (Reich  
7 Decl.) ¶ 96.

8 303. Absent specific instruction, HVI is unlikely to comply with the law  
9 based on its longstanding pattern of failing to do so. See Dkt. No. 345-11  
10 (Kinworthy Decl.) at ¶ 18 & n.2 (HVI exhibited unusually high degree of non-  
11 compliance with industry standards.).

12 304. Absent independent third-party verification and absent specific  
13 requirements to maintain verifiable and detailed records, the Court and the  
14 Plaintiffs will lack means of meaningfully evaluating and verifying HVI's  
15 compliance with the law and Injunctive Relief. Dkt. No. 345-2 (Reich Decl.) at  
16 ¶¶ 83-95 (explaining need for means of compliance assurance to ensure HVI  
17 comes into compliance and remains in compliance). As one example, HVI was  
18 aware of the need for a flowline maintenance program in 2005, yet still had not  
19 developed one or mapped its flowlines by 2008 despite repeated notices from EPA.  
20 ¶¶ 44-48 supra (citing repeated Notices of Non-compliance and Notices of  
21 Violation sent by EPA to HVI). Likewise, despite HVI having some procedures  
22 and forms for routine inspections, inspection records did not identify clearly visible  
23 problems that should have been identified and noted by the field operators, or the  
24 records had insufficient information to assess their sufficiency. Dkt. No. 345-11  
25 (Kinworthy Decl.) at Ex. A (Rpt.) at 24; Dkt. No. 345-2 (Reich Decl.) at ¶ 86.

26 305. The testimony of Mr. Kinworthy and Mr. Reich supports a specific  
27 program of injunctive relief necessary to ensure that HVI complies with the law.  
28

1           306.     Mr. Kinworthy provided detailed expert testimony on actions that  
2 HVI should undertake to proactively prevent spills and achieve or maintain  
3 compliance with the SPCC and FRP regulations, taking into consideration HVI's  
4 lengthy history of recurring spills and non-compliance, the causes of the spills and  
5 escape from secondary containment, the age and condition of HVI-CC's flowlines,  
6 and a company culture that disregarded environmental compliance. Dkt. No.  
7 345-11 (Kinworthy Decl.) at Ex. A (Rpt.) at 27-37 and App. C. Mr. Kinworthy's  
8 opinions are appropriately drawn from SPCC and FRP regulations, California  
9 DOGGR (Division of Oil, Gas, and Geothermal Resources) regulations, API  
10 (American Petroleum Institute) recommended practices, and ASME (American  
11 Society of Mechanical Engineers) standards. Id. at Ex. A (Rpt.) at 27-37 and  
12 App. C.

13           307.     Mr. Reich's testimony is based on his work as an SPCC compliance  
14 inspector at EPA, his numerous inspections of HVI's facilities in the general area  
15 of Santa Maria, California from 2005 to 2008 and in 2016, his observations of  
16 continued deficiencies at the Bell and Zaca Facilities in 2016, and his efforts to  
17 assess and monitor HVI's compliance. Dkt. No. 345-2 (Reich Decl.) at ¶¶ 2, 5, 75,  
18 80, 83-95.

19           308.     HVI-CC offered no expert witness to rebut Mr. Kinworthy's  
20 testimony. And the testimony of HVI's fact witnesses does not credibly rebut Mr.  
21 Kinworthy's opinions or Mr. Reich's testimony, especially in light of the  
22 circumstances and the history of spills and regulatory violations that demonstrate  
23 its ongoing unwillingness or inability to comply with the law and to operate as a  
24 prudent operator of an oil production company would.

25           **C. Specific Elements of Necessary Injunctive Relief**

26           308.     Considering HVI-CC's history of releases from pipelines, and the  
27 number of old, unidentified and non-permanently closed lines at its facilities, it is  
28 necessary under the circumstances for HVI to:

1           a.       conduct a comprehensive assessment of all of its pipelines, to  
2 identify which lines it will continue to use as active pipelines, and to permanently  
3 close the remaining lines by ensuring that they are drained and then cutting them  
4 from other systems and capping the open ends;

5           b.       conduct visual inspections that are made close enough to the  
6 equipment for meaningful inspection;

7           c.       conduct monthly visual inspections that consist of walking the  
8 lines instead of driving by;

9           d.       routinely remove vegetation and soil accumulations from the  
10 lines to facilitate visibility and access and reduce the risk of external corrosion;

11          e.       place any new or replacement aboveground pipeline segments  
12 on elevated racks, piers or other supports to facilitate visibility, and also to limit  
13 contact with soil and other hydrophagic materials;

14          f.       construct any new or replacement buried or partially buried  
15 pipeline segments with poly-wrap, epoxy coat, or equivalent field wrap;

16          g.       perform mechanical integrity tests of all pipelines located in an  
17 environmentally sensitive area every two years;

18          h.       perform mechanical integrity tests of all pipelines not in an  
19 environmentally sensitive area every five years;

20          i.       replace temporary pairs on pipelines (such as collars, clamps,  
21 patches, and sleeves) with a permanent pipeline segment repair within 30 days of  
22 completing the temporary repair or of permit issuance for replacement of any such  
23 pipeline segment.

24       309.       Considering HVI's history of secondary containment failures and  
25 inadequacies, and that HVI uses several large pits and ponds as long-term oil  
26 storage, which also have been the source of spills but have not been subjected to  
27 systematic measures to ensure their integrity, it is necessary under the  
28 circumstances for HVI to:



1           a.     drain, clean, and visually inspect for integrity Blochman Pond  
2 and Pit #2 at the Bell Facility (“Bell Pit #2”), the lower pond at the Casmalia  
3 Facility, and both ponds at the Los Flores Facility;

4           b.     Before returning any oil (including crude oil, produced water,  
5 or any mix thereof) into any pit or pond, line or seal the pit or pond to repair any  
6 identified cracks or leaks and restore the integrity of the unit.

7           310.    Considering that there is no means of secondary containment for  
8 Bell Pit #2 and, it is necessary under the circumstances for HVI to install  
9 appropriately sized secondary containment, and to prepare a Facility Response  
10 Plan for the Bell Facility in accordance with 40 C.F.R. § 112.20 so long as HVI-  
11 CC continues to use Bell Pit #2 as oil storage causing the Bell Facility to have  
12 more than 1,000,000 gallons of oil storage capacity.

13           311.    Considering that there is no containment berm or other diversionary  
14 structure downgradient of Bell Pit #2 that would prevent a release from the existing  
15 truck loading/unloading area from migrating down Palmer Road toward the  
16 adjacent creek, it is necessary under the circumstances for HVI to construct an  
17 additional containment berm downgradient of any truck loading/unloading area to  
18 steer any potential discharge from the loading/unloading area away from Palmer  
19 Road.

20           312.    Considering that there are no drainage controls or secondary  
21 containment at the truck loading/unloading area at the Battles Facility, it is  
22 necessary under the circumstances for HVI to construct such drainage controls or  
23 secondary containment.

24           313.    Considering the SPCC Plan deficiencies that persisted for years, it  
25 is necessary for HVI to:

26           a.     have SPCC plans for each facility that reflect the operational  
27 conditions and procedures intended to prevent and respond to releases of oil in a  
28 manner consistent with the requirements of 40 C.F.R. Part 112, and amend its

1 SPCC plans to recognize improvements to prevent and respond to releases of oil  
2 in a manner consistent with the requirements of 40 C.F.R. Part 112;

3           b.     have SPCC plans for each facility that contain maps, using a  
4 geospatial database that is compliant with Federal Geographic Data Committee  
5 and EPA Metadata Editor requirements for metadata and accurate within one  
6 meter, that identify: tanks, oil storage areas, transfer/loading areas, oil pits and  
7 ponds, secondary containment structures, storm drain inlets, storm water and oil  
8 catchment areas, wellheads, facility roads and public thoroughfares,  
9 environmentally sensitive areas; all pipeline segments, denoting the type, grade,  
10 installation date, design and operating pressure, pipeline segments that are buried  
11 (including partially buried) and pipeline segments not elevated on racks or piers;  
12 topography; surface waters; facility boundaries; components of production and  
13 storage infrastructure to distinguish among those that are in-service, idle, or out-  
14 of-service; headers and manifolds; all pressure gauges and valves, identifying  
15 valves by type; pipeline segments with collars, sleeves or other temporary repairs  
16 and the date of installation; all access ports for pipeline testing and cleaning;  
17 corrosion monitoring or inhibiting equipment or devices; safety shut-down  
18 devices; general condition and leak, repair, inspection and mechanical integrity  
19 testing history for each pipeline segment;

20           c.     have SPCC plans for each facility that provide for operational  
21 controls to provide for the removal of liquids or debris in containment areas, pits,  
22 sumps, and well cellars within two days of any oil, precipitation, or other liquids  
23 or debris, so that no such fixture accumulates liquids or debris that exceeds 50  
24 percent of its storage capacity; and

25           d.     have SPCC plans for each facility that provide for high-level,  
26 overflow or other alarms to notify operators of potential concerns, which must be  
27 operational at all times except when a facility is manned.  
28

1           314.     Considering the poor performance by HVI and its employees in  
2 several responses to oil spills and in carrying out inspections of equipment,  
3 facilities, and pipelines, it is necessary under the circumstances for HVI to:

4               a.     train pipeline inspectors to identify areas of corrosion damage;  
5               b.     train pipeline inspectors of the schedule and manner for  
6 pipeline inspections, including identifying problems that require further  
7 evaluation, call for repairs, need correction or cleanup; the inspection obligations  
8 for flowlines, equipment, tanks, ponds, and secondary containment; the  
9 maintenance of equipment, including removing vegetation and dirt covering  
10 flowlines; the inspection and testing of items such as alarms and sensors; and  
11 procedures responding to spill events;

12               c.     provide its Safety Coordinator and Regulatory Compliance  
13 Officer (or similar positions) with Incident Command System (“ICS”) training at  
14 the 100 level;

15               d.     incorporate ICS-100 level training into its annual or new oil-  
16 handling employee SPCC training, and shall require all employees, contractors,  
17 and Oil Spill Response Operators who respond to spills from HVI-CC’s facilities  
18 to have taken ICS training at the 100 level prior to participating in any response;  
19 and

20               e.     require its Safety Coordinator (or similar position) to obtain  
21 HAZWOPER 40-hour training, as set forth at 29 C.F.R. § 1910.120, and maintain  
22 his or her certification.

23           315.     Considering that HVI suffered nine releases from its pipelines,  
24 including the 16,627-barrel 7/16/07 Bell Spill, which could have been prevented by  
25 a more comprehensive flowline maintenance program or better implementation of  
26 its existing Pipeline Management Plan (“PMP”), it is necessary under the  
27 circumstances for HVI to revise its PMP and flowline management practices to  
28 include:

1           a. a schedule and standards for the inspection, assessment, and  
2 monitoring of pipelines that provides for monthly visual inspections (“Monthly  
3 Visual Inspections”) of all pipeline segments that are not completely buried in  
4 order to identify: active leaks and threats to pipeline integrity, including but not  
5 limited to, erosion, corrosion, dents, cracks, creases, potential impacts from rocks  
6 and trees, and other risks that may result in a discharge;

7           b. Monthly Routine Visual Inspections that are conducted by  
8 walking all pipeline segments that are not permanently closed;

9           c. Monthly Visual Inspections that are conducted at an appropriate  
10 frequency, pace and distance that allows for meaningful inspection, using GPS-  
11 based software loaded on employee smartphones, tablets, or similar electronic  
12 devices to track the date, route (overlaid on PMP Map), and velocity of the  
13 employees responsible for conducting the Monthly Visual Inspections;

14           d. mechanical integrity test on all pipelines within one (1) year,  
15 and a mechanical integrity test every two (2) years thereafter on pipeline segments  
16 that are “environmentally sensitive” or within “environmentally sensitive” areas  
17 (“ESAs”), as defined under DOGGR Regulation Section 1760 (14 Cal. Code Reg.  
18 § 1760); or every five (5) years thereafter on pipeline segments that are outside of  
19 an ESA.

20           e. a schedule and standards for replacement and/or repair of  
21 pipelines, to include at a minimum, replacing all pipeline segments within ninety  
22 (90) days that currently have collars, clamps, patches, sleeves or other temporary  
23 pipeline repairs, and within thirty (30) days for any pipeline that subsequently is  
24 given a temporary repair such as a collar, clamp, patch, sleeve, or other similar  
25 repair method that is consistent with respective SPCC plans;

26           f. HVI shall immediately shut down any pipeline that leaks,  
27 ruptures, or fails a Mechanical Integrity Test, and the pipeline must pass a  
28 Mechanical Integrity Test prior to returning the pipeline to service;

1           g.       a schedule and standards for maintenance of pipelines to  
2 include: for all pipeline segments that are not completely buried and are not  
3 already raised on racks or piers, the removal of all vegetation, soil, and debris  
4 from within four (4) feet of the pipeline to minimize the pipeline's contact with  
5 soil and ensure that the pipeline is clearly visible and accessible for inspection; the  
6 removal of soil, vegetation, and debris accumulated around pipelines within seven  
7 (7) days of identifying it during an inspection; the construction of any new buried  
8 or partially buried pipeline segment with poly-wrap, epoxy coat, or field wrap and  
9 the installation of any new or replacement pipeline segment shall be on supports  
10 or racks;

11           h.       flushing with clean water and isolating by valve closures all  
12 active pipeline segments not in service or actively used for more than thirty (30)  
13 consecutive days, and the permanent closure, as "permanently closed" is defined  
14 at 40 C.F.R. § 112.2, or removal of all pipeline segments that are not in service or  
15 actively used for more than 365 consecutive days (removing or marking them as  
16 "permanently closed" in the respective SPCC plans or PMP);

17           i.       continuously applying corrosion inhibitors as prescribed in the  
18 PMP;

19           j.       conducting a flowline elevation survey to identify the most  
20 likely areas for water or solids holdup to occur in pipelines;

21           k.       marking flowlines with paint to indicate fluids carried, direction  
22 of flow, and line name.

23       316.       Considering that HVI-CC suffered at least two releases of oil  
24 because of faulty alarms, it is necessary under the circumstances for HVI to  
25 establish and implement procedures for the inspection, testing, and repairing of its  
26 high-level, overflow or other alarms, to include annual testing by a qualified  
27 technician.  
28

1           317.     Considering that HVI-CC has a record of not identifying or  
2     correcting issues of non-compliance with applicable regulations, even after being  
3     notified of deficiencies by regulating agencies, it is necessary under the  
4     circumstances for HVI to retain an independent third-party verifier (“Verifier”) to  
5     assess and report to EPA and co-Plaintiff Regional Water Quality Control Board,  
6     Central Coast Region on implementation of HVI-CC’s compliance with the  
7     necessary actions described above, 40 C.F.R. Part 112, and 14 Cal. Code Reg. §  
8     1770 et seq. at a regular schedule, unless and until EPA and the Regional Board  
9     approve a finding in Verifier’s report that HVI-CC is in substantial compliance and  
10    the Court also approves. It is further necessary for the Verifier to: demonstrate and  
11    maintain independence from HVI; have demonstrated knowledge of federal and  
12    state regulations regarding the operation of oil production fields, to have  
13    demonstrated experience preparing SPCC plans (including pipeline integrity  
14    management plans and contingency plans); have demonstrated experience in  
15    environmental compliance review within the last five years at or for an oil  
16    production facility; not be owned by HVI-CC or any of its parent, subsidiary, or  
17    affiliated companies ; and not have performed work for HVI-CC within the last  
18    three years, including research, development, design, construction, financial,  
19    engineering, legal, consulting/advisory services.

20           318.     To ensure adequate tracking of inspection and maintenance  
21    obligations and to facilitate the review of the Expert Consultant, it is necessary  
22    under the circumstances to for HVI to:

23           a.     Maintain narrative information regarding the condition of  
24    pipelines observed during Monthly Visual Inspections or other inspections,  
25    including any corrosion or other conditions that could lead to a discharge;

26           b.     Maintain narrative information regarding the presence of  
27    vegetation, soil, debris or other conditions that prevent comprehensive visual  
28



1 inspection of pipelines, as observed during Monthly Visual Inspections or other  
2 inspections;

3 c. Maintain narrative regarding the condition of secondary  
4 containment, as observed during Monthly Visual Inspections or other inspections;

5 d. Complete, within ninety (90) days of any pipeline release or  
6 any release from another source that is greater than ten (10) barrels, a written root  
7 cause analysis and perform corrective action to address the identified cause of the  
8 release;

9 e. Submit electronically to Plaintiffs an annual report for the  
10 preceding twelve-month period ("Annual Report") that shall provide the following:

11 (i) A statement HVI-CC's progress in implementing each  
12 injunctive task, including any problems encountered in implementing such tasks,  
13 together with implemented or proposed solutions;

14 (ii) Any updated PMP;

15 (iii) Pipeline inspection tracking data overlaid on the PMP  
16 Map for each facility;

17 (iv) A list of all pipeline releases of oil at any of HVI-CC's  
18 Santa Barbara County facilities, excluding releases of less than one barrel from a  
19 pipeline segment that occur in connection with routine maintenance, and all  
20 releases of oil (including produced water) greater than one barrel of oil (including  
21 produced water) from any other source;

22 (v) A copy of all root cause analyses performed;

23 (vi) A list of all SPCC training provided to each individual  
24 employee;

25 f. Signed certification by an HVI-CC official under penalty of  
26 law.

27 319. Considering the extent of HVI's companywide failures across  
28 multiple facilities in Santa Barbara County, the lengthy period of time it has

1 remained noncompliant, and the schedule for flowline integrity testing and  
2 independent third-party verification in the Injunctive Relief, it is necessary that the  
3 Injunctive Relief apply for ten years. It is also necessary to require that the  
4 Injunctive Relief apply to any oil and gas production facilities that HVI acquires in  
5 Santa Barbara County while the Injunctive Relief is still in place.

6 **VIII. REMOVAL COSTS INCURRED BY THE UNITED STATES AS A**  
7 **RESULT OF THE DECEMBER 27, 2008 BELL SPILL AND THE**  
8 **APRIL 2008 GATOS PONDS REMOVAL ACTION**

9 *Except where an owner or operator of an onshore facility can prove*  
10 *that a discharge was caused solely by (A) an act of God, (B) an act of*  
11 *war, (C) negligence on the part of the United States Government, or*  
12 *(D) an act or omission of a third party without regard to whether any*  
13 *such act or omission was or was not negligent, or any combination of*  
14 *the foregoing clauses, such owner or operator of any such facility*  
15 *from which oil or a hazardous substance is discharged in violation of*  
16 *subsection (b)(3) of this section shall be liable to the United States*  
17 *Government for the actual costs incurred under subsection (c) for the*  
18 *removal of such oil or substance by the United States Government in*  
19 *an amount not to exceed \$50,000,000....*

20 33 U.S.C. § 1321(f)(2).

21 320. EPA and the United States Coast Guard incurred \$192,656.07 in  
22 removal costs following the December 27, 2008 Bell Spill. Dkt. No. 307 at 5:3-4  
23 (Partial Summary Judgment Order). These costs were paid by the National  
24 Pollution Funds Center out of the Oil Spill Liability Trust Fund. Id. at 5:6-7.

25 321. EPA and the United States Coast Guard incurred \$50,538.92 in  
26 removal costs in directing, monitoring and evaluating HVI's removal of the Gatos  
27 Ponds in April, 2008. Id. at 5:1-2. These costs were paid by the National Pollution  
28 Funds Center out of the Oil Spill Liability Trust Fund. Id. at 5:6-7.

1           322. At the time of the April 2008 Gatos Ponds removal action, the Gatos  
2 Ponds posed a substantial threat of discharge of oil into or upon Sisquoc Creek at  
3 points below its confluence with Palmer Road Creek. Dkt. No. \_\_\_\_ at 52:15–53:3  
4 (10/22/18 Trial Tr. Vol. II, Test. of Wise); Dkt. No. 442 at Admitted Fact ¶ 5.eee  
5 (Final Pretrial Conf. Order) (establishing proximity of the Gato Ponds to Sisquoc  
6 Creek).

7           323. In formulating federal response actions to the December 27, 2008 Bell  
8 Spill and the April 2008 Gatos Ponds removal action, the federal On-Scene  
9 Coordinator considered, inter alia, (1) the volume of the oil and its proximity to  
10 navigable waters of the United States; (2) the impact of the discharge and  
11 threatened discharge on human safety and the environment; (3) the effectiveness of  
12 HVI’s containment efforts; (4) the likelihood of a continuing discharge; and (5) the  
13 need for prophylactic measures. Dkt. No. 345-10 (Wise Decl.) ¶¶ 64, 71 (citing  
14 EPA Pollution Reports).

15           324. In formulating federal response actions to the December 27, 2008 Bell  
16 Spill and the April 2008 Gato Ponds removal action, the federal On-Scene  
17 Coordinator followed the National Contingency Plan. Dkt. No. \_\_\_\_ at 46:13–19  
18 (10/22/18 Trial Tr. Vol. II, Test. of Wise).

19           325. HVI has not reimbursed the Oil Spill Liability Trust Fund for removal  
20 costs stemming from the December 27, 2008 Bell Spill or the April 2008 Gatos  
21 Ponds removal action. Dkt. No. 307 at 5:7-9 (Partial Summary Judgment Order).

22           326. HVI owes the Oil Spill Liability Trust Fund a total of \$243,194.99,  
23 plus interest, for removal costs incurred by EPA and the United States Coast Guard  
24 as a result of the December 27, 2008 Bell Spill and the April 2008 Gatos Ponds  
25 removal action.  
26  
27  
28

Respectfully submitted,

Dated: December 17, 2018

/s/ Davis H. Forsythe

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# Attachment A

UNITED STATES OF AMERICA  
UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
WESTERN DIVISION

- - -  
HONORABLE FERNANDO M. OLGUIN  
UNITED STATES DISTRICT JUDGE PRESIDING  
- - -

UNITED STATES OF AMERICA, )  
ET AL., )  
 )  
PLAINTIFF, )  
 ) CASE NO.: CV  
VS. ) 11-5097-FMO  
 )  
HVI CAT CANYON, INC., )  
 )  
DEFENDANT. )  
\_\_\_\_\_ )

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
(P.M. SESSION)

TUESDAY, OCTOBER 23, 2018

LOS ANGELES, CALIFORNIA

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2 - - -

3 THE COURT: We're back on the record in 11-5097.

4 Are you ready to proceed with your next witness?

5 Go ahead.

6 MS. MO: The plaintiff calls Mark Calhoon, a  
7 retired SPCC Compliance Inspector for EPA.

8 THE CLERK: Please raise your right hand.

9 (Witness sworn.)

10 THE CLERK: Thank you. Please have a seat.

11 MS. MO: Your Honor, may I approach the witness?

12 THE COURT: Go ahead.

13 THE CLERK: Please state your name for the record  
14 and spell your last name.

15 THE WITNESS: My name is Mark Calhoon and my  
16 spelling is C-a-l-h-o-o-n.

17 DIRECT EXAMINATION

18 BY MS. MO:

19 Q. Good afternoon, Mr. Calhoon.

20 Do you recognize the document I just handed you?

21 A. I do.

22 Q. Is it your trial declaration in this case?

23 A. Yes.

24 Q. Do you adopt your trial declaration as your sworn  
25 testimony under oath in this case?

1 A. I do.

2 MS. MO: For the record his declaration was filed  
3 to the court as Docket No. 345-1. We move that into  
4 evidence. We also move into evidence each of the exhibits  
5 referenced in Mr. Calhoon's declaration as they're listed in  
6 Docket No. 437. Admissibility of each of these exhibits has  
7 been stipulated to by the parties as shown in the third Joint  
8 Exhibit Stipulation at Docket 430-1.

9 THE COURT: So admitted.

10 MS. MO: Thank you. We tender the witness.

11 MR. DIAMOND: Your Honor, I'm giving Mr. Sullivan a  
12 short break. I do have one housekeeping matter, if I may,  
13 before I start the cross-examination. I'm very mindful of  
14 the time and the clock that we're all running against  
15 pursuant to Your Honor's instructions. And I hopefully --  
16 hope that you believe we've been trying to be as efficient  
17 and as fast as we possibly can.

18 But I just want to say that we're gonna continue to  
19 try to get it all done within the time frame. I don't think  
20 there's that many witnesses left, but if the Court will beg  
21 our indulgence, if we run a little bit over, we would really  
22 appreciate a little bit of that time.

23 THE COURT: I don't think that should be a problem.  
24 You're at 5 hours and 36 minutes right now just to give you  
25 the head's up. I do feel like you guys have been trying to

1 moving it along, both sides, as quickly as you can. And I  
2 know once your witnesses come on, it's gonna be their time.

3 MR. DIAMOND: Yes. We have a lot fewer witnesses  
4 so it should go a lot faster. Okay. I'm ready.

5 THE COURT: Go ahead.

6 CROSS-EXAMINATION

7 BY MR. DIAMOND:

8 Q. Good afternoon, Mr. Calhoon.

9 A. Good afternoon.

10 Q. You worked for the EPA until your retirement, uh, in  
11 2007 as an inspector, uh, related to compliance with the SPCC  
12 regulations; is that correct?

13 A. A period of that time. I worked for EPA from 1993  
14 through 2007. The last five years among my duties was SPCC  
15 inspections.

16 Q. Okay. I'm sorry. I just want to make sure I understood  
17 what you just said.

18 A. Certainly.

19 Q. You're still working for the EPA today?

20 A. No, I'm no longer -- I retired in 2007, August of 2007.

21 Q. But you do consulting work?

22 A. No, I don't.

23 Q. Okay. I misunderstood what you said about the last five  
24 years.

25 A. So, uh, from 1993 until 2007, I worked for EPA. From

1 2002, if my math holds up, to 2007, I was an SPCC inspector  
2 among other duties.

3 Q. Understood. Thank you.

4 A. All right.

5 Q. I want to direct your attention to the December 7, 2005  
6 spill incident at the Zaca facility which is in your trial  
7 declaration starting on page 3 Paragraph 10. And I believe  
8 you have testified that oil had escaped from the containment  
9 unit and flowed into an unnamed seasonal creek bed. Do you  
10 recall that?

11 A. I recall that.

12 Q. And you prepared a compliance inspection report with  
13 respect to this spill; correct?

14 A. Uh, that's correct.

15 Q. Uh, and in your report, I believe I didn't see any  
16 specifics as to precisely what you personally saw. Was that  
17 because the information predominantly came from your  
18 recollection and conversations with others that you had with  
19 Tom Dahlgren and other HVI employees?

20 A. I believe there were pictures in the inspection report  
21 and that was based on my physical observations while I was  
22 there.

23 Q. Okay.

24 A. I did have conversation with some Greka employees. I  
25 don't remember the exact names. But if we could pull my



1 report, maybe we could see them. They'll be listed there.

2 Q. Yeah, we can do that in a moment. Um, well, let's pull  
3 up U.S. 0873, please, at page 6.

4 Mr. Calhoon, this is, uh, if you want to see the  
5 front cover of the report, I'm happy to go back to page 1,  
6 but I believe starting on page 6 is where you describe the  
7 spill incident on 12-07-05. Do you see that?

8 A. I -- yes, I see the narrative description. There's a  
9 previous reference to it, I believe, in the report. If you  
10 go back to page 1 for a moment?

11 Q. Okay, we can do that.

12 A. And could we advance just one more page. So in this  
13 picture you're seeing the Davis facility and you're seeing  
14 the tanks. And, uh, right there, and then as we advance --

15 Q. If I may, I understand there's photos, but my question  
16 went to specifics in terms of your write-up of the spill  
17 incident which unless there's some other place, I think it  
18 was on page 6.

19 A. You were on right on page 6 is where I reported the  
20 information that was given to me by the Greka employees.

21 Q. Precisely.

22 A. I'm sorry. I misunderstood the question.

23 Q. You personally did not walk the path of the creek bed,  
24 did you?

25 A. No. We drove by it on the way into the facility and it

1 was to the left and we stayed out of it, obviously, and drove  
2 up to the facility.

3 Q. And you personally did not conduct any physical  
4 verification of the spill path by inspecting, obviously,  
5 either the creek bed or like you said getting out of the car  
6 and walking around the surrounding area; correct?

7 A. We were across the street from, uh, the facility where  
8 the spill occurred. So we could see the former, the  
9 secondary containment, we could see the creek to the left.  
10 Actually, it was running by the road there is where it was.  
11 So we saw those two portions.

12 Q. Okay. Prior to the December 2005 spill that we're  
13 talking about, you had conducted field inspections at other  
14 HVI oil locations during 2005; true?

15 A. I believe they're called Greka facilities, but yes.

16 Q. I'm glad you mentioned that. Throughout the course of  
17 the trial, sir, we've interchangeably used the name Greka and  
18 HVI because --

19 A. I only knew them as Greka.

20 Q. Understood. I'll tell you what. I'll try to use Greka  
21 for you.

22 A. I'm with you now I think.

23 Q. All right. So indeed if you recall on October 25th,  
24 2005, you conducted a field inspection at the Cat Canyon oil  
25 field in Santa Barbara county. Do you recall that?

1 A. Uh, yes, I do.

2 Q. And you made various suggestions to HVI in connection  
3 with that field inspection, did you not?

4 A. I believe we issued a letter to them that, and I don't  
5 remember that in much detail. It was not one of the ones I  
6 reviewed before we came here.

7 Q. Let's pull up HVI, please, Exhibit 31.

8 Mr. Calhoon, I've pulled up in front of you what  
9 has been admitted into evidence as HVI Exhibit 31 which is a  
10 letter dated November 14, 2005 to you from Greka Energy and  
11 you'll notice in the reference paragraph it says Field  
12 Inspection of October 25, 2005. Do you see that?

13 A. I see that.

14 Q. And to the best of your recollection, is this the  
15 response to your suggestions? The letter that you just  
16 mentioned that you received from Greka or HVI?

17 A. I believe this is the response that came in.

18 Q. And --

19 A. I haven't seen it in 13 years, but, yeah, it looks like  
20 the kind of the response we would expect to receive back in  
21 connection with one of our letters to the facility.

22 Q. And to the best of your recollection today, I know it's  
23 been a long time, was this HVI's, again, response to the  
24 various suggestions that would have been in the letter to  
25 which this is a response?

1 A. It appears to be. I'm not sure it's the entire -- is  
2 there a second page?

3 Q. There is not.

4 A. I can't help you then. I'm sorry.

5 Q. Okay.

6 A. There would have been a signature page at least at the  
7 end. I mean, somewhere there's --

8 Q. I -- I noticed that myself. But this does at least  
9 appear to be --

10 A. It appears to be the kind of correspondence we would  
11 receive back in connection with an inspection.

12 Q. And do you recall whether you had any problems or issues  
13 with any of the work that HVI was responding to with respect  
14 to your suggestions?

15 A. It appeared to address the issues that we had identified  
16 with them. I'm trying to recall, and you don't happen to  
17 have the inspection report, do you?

18 Q. Uh, let's see. Not --

19 A. I'm just kind of concerned that it drops off abruptly.  
20 I don't know if it answers -- not knowing all the issues that  
21 were brought up, I'm not sure it answered all the issues that  
22 were addressed. But if this is a response, these responses  
23 were accepted.

24 Q. And with respect to your inspections on both  
25 October 25th, 2005 and the one in December 2005 that we have

1 been talking about, do you recall also providing HVI with a  
2 list of deficiencies that you wanted them to address?

3 A. Yes. I'm going based strictly on process. When we  
4 would do an inspection, we would, uh, do the inspection, come  
5 back to the office, write up -- finish off the report  
6 basically. At that time within two weeks we would get a  
7 letter back to the facility. We would also have discussed  
8 all these issues with the Greka representative before we left  
9 the facility.

10 And the reason for that discussion was to make sure  
11 that we saw everything as they saw it also and if they had  
12 any additional information, uh, they could provide it. It  
13 would help us flesh out exactly what was going on.

14 Q. Understood. If we could pull up U.S. Exhibit 0748,  
15 please. Mr. Calhoon, this is a letter dated January 23rd,  
16 2006 to you at U.S. EPA. Again, in the reference paragraph,  
17 you'll see it references the field inspection October of  
18 2005. And I just have a few questions for you about this  
19 letter.

20 A. Sure.

21 Q. And this letter came from, I think there is a second  
22 page, from Tom Dahlgren at Greka. If we can pull that up so  
23 the witness can see that, please. There we go.

24 A. Okay. Could you go back one page, please?

25 Q. I can tell you it's a three-page letter.

1 A. I see it.

2 Q. All right. And do you see it was sent to you by Tom  
3 Dahlgren at what was then Greka who was the -- did you  
4 understand him to be the environmental manager?

5 A. I was told that was his position.

6 Q. If you would on the first page of this document under  
7 Deficiency No. 2 where Mr. Dahlgren addresses the December 7,  
8 2005 Zaca spill, do you see that?

9 A. I see that.

10 Q. And with respect to that spill, this is Mr. Dahlgren's  
11 response to you in terms of what Greka plans to do to address  
12 the deficiencies; correct?

13 A. That's correct.

14 Q. And with respect to the Deficiency Paragraph No. 6, if  
15 you can turn that, this is on the second page of this letter  
16 and it has the Deficiency No. 6 that you identified in your  
17 letter. The -- Mr. Dahlgren is responding to the flowline  
18 maintenance program. Do you see that?

19 A. I see that.

20 Q. And in the first, uh, Paragraph A he says, we have  
21 attached a copy of the daily Pumpers Responsibility Check  
22 List for all the facilities, wells and equipment both active  
23 and out of service.

24 Do you know what the Pumpers Responsibility Check  
25 List was that Greka maintained?



1 A. It was a form that the, uh, pumpers carried around on  
2 their daily rounds and they would notate, uh, if there were  
3 things that were, uh, off kilter, you know. They'd check the  
4 secondary containment and it's just kind of a check list to  
5 work from.

6 Q. And was the purpose of it as you understood it to make  
7 sure that they were, uh, from a safety standpoint, they were  
8 checking the facilities, checking the wells, checking the  
9 pumps, going out and making sure that nothing was wrong, and  
10 then putting it on their check list?

11 A. And making a record of it that they had made the round,  
12 yeah.

13 Q. Thank you, sir.

14 And did you understand as it's reflected in  
15 Mr. Dahlgren's Paragraph A, the second sentence, um, that  
16 Greka always had a regular inspection program for draining  
17 fluids from the cellars, locations, ponds and tanks?

18 A. While I read the next sentence, we now stress the  
19 importance of making sure all out of service facilities are  
20 also included so that was the issue. There were a large  
21 number of out-of-service tanks that were still connected,  
22 still hooked up. They were decaying condition and nobody had  
23 looked at them. In fact when we asked the pumper, I believe  
24 Tom and I ran into one of the pumpers making his rounds and  
25 we asked him specifically were you looking at that tank and

1       they said no, it's out of service. I said okay. But it  
2       hadn't been disconnected. It hadn't been clean closed. It  
3       hadn't been, uh, marked as out of service, big letters.

4       Q. I'm gonna come to the tank in a moment.

5       A. Oh, okay.

6       Q. That I think you're referring to.

7       A. Okay.

8       Q. But let me just ask you did you get to know Mr. Dahlgren  
9       fairly well in those -- in those years?

10      A. Not really. In fact one, um, of the subsequent issues  
11      was he left his position and somebody else as I recall came  
12      in so it was kind of a -- I made another trip down there to  
13      meet with that new person and kind of bring him up to speed  
14      on this issue. It's not only the tanks and, uh, the  
15      out-of-service tanks, but there was other equipment, too,  
16      such as flowlines and other equipment that was no longer  
17      being used.

18               The -- many of the Greka facilities were old  
19      installations and at different times had different operators.  
20      Different operators had different places where they were  
21      putting oil. That's how come these out-of-service tanks kind  
22      of got left behind is they're there, that's where they used  
23      to make the transfer of the ownership, but they since  
24      consolidated that operation somewhere else and so we're  
25      pumping the oil here and there.

1           So there were a lot of these lines that it was  
2       unclear if anyone really knew where what was. Uh, in fact --  
3       Q.   Well, would it be fair to say, sir, that at least  
4       Mr. Dahlgren at this time frame was earnestly trying to  
5       respond to your suggestions or deficiencies and trying to  
6       address them?

7       A.   I felt he made a response. He wasn't -- I think I gave  
8       him 60 days to come up with something. One of the concerns  
9       also was Tom Dahlgren couldn't tell me how many of  
10      out-of-service tanks there were or where they were located.  
11      We both agreed, uh, that it was difficult to determine what  
12      was being inspected and what wasn't other than the statement  
13      from the pumper that he believed the tank was out of service.  
14      He wasn't inspecting it.

15      Q.   And which tank are you referring to?

16      A.   I don't recall specifically. Again, I haven't seen this  
17      inspection report. I asked you to produce it, uh, because it  
18      would help. Uh, it would be listed in that inspection report  
19      somewhere.

20      Q.   Did you ever feel, sir, that anyone that you were  
21      working with at Greka at the time with respect to your  
22      suggestions or deficiencies and their responses was either  
23      ignoring you or acting in any manner that was other than  
24      trying to be responsive?

25      A.   No, sir.

1 Q. Let me -- let's pull up, please, uh, the U.S.  
2 Exhibit 2953. And I'm gonna turn your attention, Mr. Calhoon  
3 to your direct testimony with respect to the 2006 inspection  
4 of the Battles facility.

5 A. Okay.

6 Q. Which I believe starts on page 4 of your prior  
7 declaration testimony paragraph 12. The report that's in  
8 front of you entitled compliance inspection report, do you  
9 see that?

10 A. I see it.

11 Q. And in that report do you recall writing up in  
12 particular Tank 903 as not being clean closed? And I'm going  
13 to ask that we please pull up page 2, Photos 1 and 2. That's  
14 perfect.

15 A. I see it.

16 Q. Do you recall this?

17 A. I recall this tank.

18 Q. And could you please tell the Court what you mean by  
19 clean closed?

20 A. Well, the regulations require that the tank, all the  
21 liquids be removed, the bottoms taken out which is the  
22 accumulation over the years of material in the tank, and then  
23 the tank, uh, generally, the industry practice is to somehow  
24 it's either steam 'em or spray 'em, uh, with water to kind of  
25 give them a little flush. And then the manheads are either

1 removed or a blank flange is put in, and then the tank is  
2 mark out of service as this one is in the picture. And the  
3 reason for that removal of the connections is to make sure  
4 they don't go back into service unless somebody has examined  
5 them and determined they're still suitable for use.

6 Q. And the photos that you have in front of you from your  
7 report, these are ones that you took personally; correct?

8 A. I took these pictures personally.

9 Q. And you noted underneath the photo this tank is marked  
10 out of service, but has not been clean closed.

11 A. That's correct.

12 Q. And you also didn't note, well, strike that.

13 On, as you can see, on the across the bottom third  
14 of the tank, it's marked in some kind of lettering where it  
15 says out of service; correct?

16 A. That's correct.

17 Q. Do you recall was that like painted on or how was that  
18 put on?

19 A. I believe it was painted on.

20 Q. And did it, uh, as it appears in this photo to be quite  
21 obvious in terms of being readable?

22 A. I can read it.

23 Q. Uh, Greka's -- well --

24 A. I think if you go on in the report, it will help. It  
25 says that we examined the tank and it had not been

1 disconnected. This is a large tank and, uh, usually the  
2 manholes would be either screened off or blank flanged to  
3 prevent it from being used again until such time as somebody  
4 inspected it. This qualified individual to determine the  
5 tank was still suitable. You'll note on the top of the  
6 picture all the rust and deterioration going on.

7 Q. Which would seem to be consistent with a tank that's out  
8 of service, would it not?

9 A. Not necessarily. I mean, many tanks that go out of  
10 service can still be used again if before being put back in  
11 service somebody inspects them, uh, usually with ultrasound  
12 or a visual inspection by a qualified engineer and they can  
13 determine that it's eligible for reuse.

14 Q. You wouldn't expect looking at these tanks with the  
15 deterioration at the top that these are gonna be used without  
16 some significant repair; correct?

17 A. I wouldn't expect these tanks to be reused at all quite  
18 frankly. The issue with, uh, the corrosion up at the top and  
19 the holes cause that allows water to go. And so if the tank  
20 has not been clean closed, in other words, someone is not  
21 cleaning out the bottoms and any residual oil from clinging  
22 on the sides of the tank, it'll slowly accumulate down at the  
23 bottom.

24 And instead of maybe 50 gallons of oil, you now  
25 have maybe 3,000 gallons of watery oil that you can't



1 release. So it's important that these tanks be clean closed  
2 when they're not gonna be in use. And it's important that  
3 they be disconnected from the system to prevent them from  
4 inadvertently being reused. You have to make a conscious  
5 decision I want to reuse that tank, and I need to get an  
6 engineer out here to tell me the tank is still usable and  
7 then you restore the connections.

8 Q. But, again, as you just testified, you wouldn't expect  
9 these particular tanks to be used at all.

10 A. I wouldn't expect they would pass an inspection, no.

11 Q. Let's pull up please HVI Exhibit 46. This is a letter,  
12 Mr. Calhoon, also addressed to you.

13 A. I see it.

14 Q. Uh, dated, uh, January 23, 2007. This one is signed --  
15 it's also a three-page letter -- signed by Mr. Bob Allen who  
16 is the -- at the time the regulatory manager at Greka. Do  
17 you recall him?

18 A. Uh, vaguely. I think he was -- they -- they were  
19 switched out. As I recall it, there may have been three  
20 different environmental managers during the period I was  
21 doing inspections there which is little unusual, but not...

22 Q. And if you look at the first page, the first sentence.

23 A. Can you remove the --

24 Q. Yeah, it's coming to you.

25 It's, uh, HVI thanking you for your letter and

1 notice of violation that you sent on December 28, 2006  
2 concerning this Battles facility, and then goes on to say the  
3 following are the responses; correct?

4 A. That's correct.

5 Q. And to the best of your recollection and taking a look  
6 at this letter, again, was HVI to your knowledge doing the  
7 best they can to respond to your notice of deficiencies and  
8 suggestions?

9 A. They were stating an intent to make these changes to  
10 address the concerns.

11 Q. And if you turn, if we can turn, please to the second  
12 page, Item No. 3, the second paragraph that starts with the  
13 word Tank 903. You see the first sentence where it says Tank  
14 903 which is the tank we just looked at the photograph of in  
15 prior exhibit; correct?

16 A. Uh, that's correct.

17 Q. And it says Tank 903 has been idle for decades with  
18 about six feet of bottoms. What did you understand that to  
19 mean?

20 A. Bottoms are the accumulation -- oil when it's placed in  
21 the tank, one of the things it does is it settles and sand,  
22 debris, heavy metals and oil will start to fractionate in it.  
23 So in addition to water which would normally be on the  
24 bottom, oil being lighter material than water, it floats in  
25 most cases, it would that be accumulation down in the bottom

1 of the tank.

2 Q. Again, at the very end of this letter, the last sentence  
3 Mr. Allen says, I thank you again for working closely with  
4 us. Um, and from the best of your recollection, was  
5 Mr. Allen and others at Greka trying to work closely with  
6 you?

7 A. We tried to maintain a good relationship with, uh,  
8 facilities, uh, in order to insure or encourage voluntary  
9 compliance.

10 Q. In your direct testimony you also made reference to the  
11 inspection of the Lakeview, Lloyd and Los Flores facilities.  
12 That's in your trial declaration starting at page 6 line 13.

13 A. Uh-huh.

14 Q. And my questions to you, sir, are --

15 A. Pardon me. Are we on Lakeview, Lloyd?

16 Q. It should be your trial declaration. Let's see if we  
17 could pull that up.

18 A. Starts on Paragraph 18?

19 Q. Correct.

20 A. Okay.

21 Q. I'm sorry. I said 13.

22 A. Yeah, I was -- that's back to the Battles, I believe.

23 Q. And you testified that upon request, there was no SPCC  
24 plan available for the Lakeview and Lloyd facilities. Do you  
25 recall that?

1 A. I recall that.

2 Q. In that connection you met with Mr. Wedderburn on the  
3 HIV -- another HVI regulatory manager; correct?

4 A. Yes, sir.

5 Q. In response to your specific question about the SPCC  
6 plans for the Lakeview and Lloyd facilities, Mr. Wedderburn  
7 told you that he did not believe that any SPCC plans for  
8 those facilities, um, existed because they were not -- those  
9 facilities were not in current, active use, did he not?

10 A. I --

11 Q. I believe if you looked at your trial declaration --

12 A. One second, please.

13 Q. On Paragraph 21 line 17 through 20.

14 A. Yes, I see.

15 Q. And he also told you that HVI had just acquired the  
16 Lakeview facility within a matter of weeks prior to your  
17 inspection; correct?

18 A. That's correct. That was probably one of the big  
19 disappointments of this inspection in that the tanks at  
20 Lakeview were clean closed, and I had such high hopes that,  
21 uh, it had been Greka who had closed those tanks.

22 Q. Are you aware today, Mr. Calhoon, that the Lakeview and  
23 Lloyd facilities are permanently shut in and otherwise have  
24 been out of service for many, many years?

25 A. I'm aware of that.

1 Q. Were you aware of that back in 2007?

2 A. I -- I -- I guess that's what I was referring to. I was  
3 aware back in 2007 that that was the situation. Again, it's  
4 one of those cases where leases are sold, new owners take  
5 over and they decide to move the oil and do the shipments  
6 different locations. They may introduce, because the oil is  
7 changing over time that they're pulling up, they may  
8 introduce more treatment than they had previously for when  
9 the well was first put in and it was an oil producer.

10 Q. Are you also aware that in the case of Lakeview it had  
11 been out of service and inactive for decades?

12 A. I'm aware of that.

13 MR. DIAMOND: Thank you, sir. I have no further  
14 questions at this time.

15 REDIRECT EXAMINATION

16 BY MS. MO:

17 Q. Mr. Calhoon, did you believe Lakeview required a SPCC  
18 plan?

19 A. Not the original Lakeview facility, but if you'll read,  
20 um, on the last page of my declaration that the Lloyd and  
21 Lakeview facilities, I observed tanks that exhibited  
22 significant corrosion damage including pinhole leaks.

23 Moreover, the secondary containment at the lower  
24 tank battery at the Lloyd facility was compromised and two  
25 tanks at the Lakeview facility were outside the secondary

1 containment. These were not part as I understand it the  
2 original Lakeview facility. These tanks had been moved  
3 there.

4 The facility operator is the one who makes the  
5 determination of what constitutes the facility. However, uh,  
6 when we do the inspection as we're moving around, we come  
7 across tank batteries, we want to know, if not this -- if  
8 this is not covered here, is it gonna be covered here? You  
9 know, which facility do you think this is?

10 These three facilities were inspected together  
11 because they're co-located. And as we are moving around, we  
12 had tanks out of service and we had tanks in service.

13 Q. Did you believe that an SPCC plan for the Lloyd facility  
14 was required?

15 A. Yes.

16 Q. Why is that?

17 A. The tanks had not been clean closed. They were still  
18 connected. As I recall, I don't recall any signage at either  
19 of these facilities. And when I asked them if they had been  
20 clean closed in terms of removing the bottoms, they couldn't  
21 answer or they said no.

22 Q. And looking to U.S. Exhibit 2822.

23 A. Could you help me with that? Okay.

24 Q. Does this look like a copy of the inspection report that  
25 you wrote for Lakeview and Los Flores?

1 A. Yes, it does.

2 Q. And if you'll go to page 3? And looking at, well,  
3 first, did you take these photographs?

4 A. I took all these photographs, yes.

5 Q. And which photographs would illustrate, um, your  
6 testimony that there were tanks at the facilities that were  
7 out of service, but not clean closed?

8 A. Uh, Tank 7, I'm sorry. Picture, uh, 8. Picture 9. Uh,  
9 Picture 7, 8, Picture 10. That's the group of pictures were  
10 all of the Lloyd and the Lakeview facilities.

11 Q. Can you describe how these observations support your  
12 testimony that these tanks were not clean closed?

13 A. Well, first, in Photograph No. 7, you'll see the  
14 original two Lakeview facility pictures, tanks, in the  
15 background and those had actually been clean closed with the  
16 exception of I didn't notice any signage. Immediately in  
17 front of those and outside the secondary containment, there  
18 are two additional small tanks that were added. When we got  
19 out and looked at these tanks, uh, as much we could, there  
20 was a lot of other debris piled around them, uh, it was clear  
21 that they were in deteriorating condition. There was no  
22 secondary containment, and I believe we saw some staining  
23 outside a couple of the pictures. Certainly, in Paragraph 9  
24 there is a corrosion pinhole leak you can see.

25 Q. If a tank isn't being used, is there any potential for a



1 spill of oil from that tank?

2 A. Certainly. Until it's been clean closed that tank has  
3 to be assumed to contain some oil. Until you go in and  
4 actually try to remove the bottoms and clean them out, you  
5 know, it will always come out.

6 When a tank empties, if you think about a glass of  
7 chocolate milk and you drink it down, there's always a little  
8 chocolate milk on the side. And over time if rain water is  
9 allowed to be introduced to that tank or, uh, just over time  
10 and gravity, it's gonna bring that all down towards the  
11 bottom. And already in there's gonna be water from  
12 separation of the original oil. There's gonna be sand, uh,  
13 some heavy metals, um, all kinds of wonderful things.

14 So the problem, though, is if you don't clean close  
15 them, over time they tend to get worse, they don't get better  
16 and more and more water accumulates. So, again, rather than  
17 dealing with 400, 500 gallons of -- of sludge at the bottom,  
18 you have 3,000 gallons of water and sludge that if it's  
19 released, it's gonna have water present. It's gonna have  
20 contaminants present.

21 Q. Turning to the December 7, 2005 spill, do you remember  
22 being asked about that early on?

23 A. Yes, the Zaca spill?

24 Q. Exactly.

25 A. Yeah.

1 Q. And Mr. Diamond referred to Paragraph 10 of your  
2 declaration. Are there -- what did you base your testimony  
3 about the spill on?

4 A. As I stated in the report itself, it was, uh, empirical  
5 data or observation that here was the secondary containment  
6 and way over here was the oil and it came from that secondary  
7 containment. So a lot of people when they think about  
8 secondary containment, they first focus on volume and they  
9 think that's the whole trick.

10 Unfortunately, the requirement is much larger than  
11 that. And one of the reasons we require a P.E. to prepare  
12 the plan and actually examine the secondary containments is  
13 it's a question of design and the suitability of the material  
14 being used to provide some kind of impermeable barrier that  
15 gives you time to respond to a spill in that secondary  
16 containment.

17 Um, so depending on the type of oil you have, you  
18 may have something that will flow very quickly through native  
19 soils. So if you had a release of that high-end oil, you  
20 wouldn't be able to respond to it very quickly if all your  
21 containment was just pushed to earth or dirt. But a heavier  
22 oil may be suitable. It would require a P.E. to examine it  
23 and consider the hydraulic flow of that material if it  
24 releases from the tank.

25 That's what they have to consider is the

1 possibility of the single largest tank in that secondary  
2 containment giving way, can they contain that oil there  
3 sufficiently so that people can respond to it and just clean  
4 it up in the secondary containment.

5 Q. Let's pull up your inspection report, and that's exhibit  
6 U.S. 0873.

7 A. Which inspection is that?

8 Q. This is Davis and Chamberlin inspection.

9 A. Yes, I see.

10 Q. Does that look like your report?

11 A. That does look like my report.

12 Q. And if you'll go to page 5.

13 A. I see it.

14 Q. Did you take these photos?

15 A. Yes, I did.

16 Q. What are they photos of?

17 A. These are photos of the secondary -- well, the first  
18 photo, Photo No. 10 is the little, uh, culvert that's right  
19 by the road as you drive into the facility. The Photo No. 11  
20 is a picture of the, uh, tank. There's two tanks actually in  
21 that secondary containment. What you can see is the wall of  
22 the secondary containment and you see some horizontal tanks  
23 behind that. Those are wash oil knock-out tanks and in the  
24 corner of those tanks, uh, is where the release was occurring  
25 out of the containment.

1           The containment went out of the secondary  
2           containment for the large wash oil tanks and went to that  
3           corner, and then went out over the top into that knock-out  
4           tank, uh, secondary containment and over that and out the  
5           facility as best I could see when I was there. Again, I did  
6           not have, uh, sufficient personal protective gear to go  
7           wandering around. Nor did I want to get in the middle of a  
8           spill where people were actively trying to still control the  
9           release.

10          Q.    Let's take a look at one more photo on this page.

11          A.    Sure.

12          Q.    Do you see Photo 12?

13          A.    I see it.

14          Q.    Did you take this photo?

15          A.    I did.

16          Q.    What does this photo show?

17          A.    This is the secondary containment at another location,  
18               uh, in that battery where you can see animal burrowing into  
19               the secondary containment unit, uh, the wall. So, again,  
20               what has occurred here is that an animal has attempted to  
21               make a den there, uh, and obviously moved out, but he has  
22               weakened the secondary containment unit itself.

23                       And quite frankly if there was a large spill and it  
24               came this direction, and you can never really predict all the  
25               directions a spill might take, nature will take its course,

1 but it probably would have gone right through there, too  
2 because the containment had been compromised.

3 MS. MO: Okay. Thank you. Nothing further. Thank  
4 you very much.

5 THE WITNESS: I apologize for speaking so close to  
6 the mic.

7 MR. DIAMOND: No questions, Your Honor.

8 THE COURT: Witness is excused.

9 THE WITNESS: Thank you, sir.

10 THE COURT: Government want to call its next  
11 witness?

12 MS. MO: Yes, Your Honor. The plaintiffs call  
13 expert witness Michael Kinworthy to the stand.

14 THE CLERK: Please raise your right hand.

15 (Witness sworn.)

16 THE CLERK: Thank you. Please have a seat.

17 Please state your name for the record and spell  
18 your last name.

19 THE WITNESS: Michael Leland Kinworthy spelled  
20 K-i-n-w-o-r-t-h-y.

21 MS. MO: May I approach the witness?

22 THE COURT: Yes.

23 MS. MO: Thank you, Your Honor.  
24  
25

DIRECT EXAMINATION

BY MS. MO:

Q. Mr. Kinworthy, do you recognize the document I just handed you?

A. I do.

Q. What is it?

A. It's my declaration and expert report.

Q. And do you adopt your declaration including your expert report as your sworn testimony under oath in this case?

A. I do.

MS. MO: And just for the record, Mr. Kinworthy's declaration including his expert report was filed with the court at Docket No. 345-11. We are offering Mr. Kinworthy's opinion on the extent of HVI's adherence to good oil field industry practices, on recommendations for compliance and on compliance costs avoided and delayed by HVI.

We move his declaration into evidence and we also move into evidence each of the exhibits referenced in his declaration as shown -- as listed at Docket No. 437. And admissibility of each of these exhibits has been stipulated to by the parties as shown in the third Joint Exhibit Stipulation at Docket 430-1.

THE COURT: So admitted.

MS. MO: Thank you, Your Honor.

We tender the witness.

1 THE COURT: You didn't get a very long break.

2 MR. SULLIVAN: Hopefully, that's not too bad for  
3 you, Your Honor.

4 THE COURT: It's okay with me. It's all good.

5 CROSS-EXAMINATION

6 BY MR. SULLIVAN:

7 Q. Good afternoon, Mr. Kinworthy.

8 A. Good afternoon, Mr. Sullivan.

9 Q. I'm going to jump straight to the points that I want to  
10 make since we have limited time.

11 Mr. Kinworthy, you believe that HVI currently has  
12 assessed its active flowlines including a detailed inspection  
13 of the flowline to determine the condition, size, length and  
14 location so they can be mapped; is that correct?

15 A. Of the active lines, yes.

16 Q. Mr. Kinworthy, are you aware of any evidence that HVI  
17 did not conduct a flowline elevation survey?

18 A. Repeat the question. I'm sorry.

19 Q. Mr. Kinworthy, are you aware of any evidence that HVI  
20 did not conduct a flowline elevation survey?

21 A. I just know that it was recommended by a contractor, but  
22 I have no idea if it was ever done. I have no idea.

23 Q. Mr. Kinworthy, you are not aware of any evidence that  
24 HVI did not implement a continuous application of corrosion  
25 inhibitors. True?



1 A. As of when?

2 Q. As of today.

3 A. As of today my understanding is they should -- they are.

4 Q. And Mr. Kinworthy, you believe that HVI currently is in  
5 compliance with regulations and laws relating to flow  
6 testing; correct?

7 A. As of today?

8 Q. Yes.

9 A. I have no knowledge.

10 Q. Mr. Kinworthy, I want to ask you to take a look at your  
11 deposition at page 73 lines 10 through 16.

12 Mr. Kinworthy, you were asked, "Do you have an  
13 opinion as to whether or not Greka appears to be -- currently  
14 be in compliance with regulations and laws related to  
15 flowline testing? You answered, "I believe they are in  
16 compliance." Does that refresh your recollection?

17 A. Yes.

18 Q. You do believe there are in compliance; right?

19 A. I don't know about today. I know as of that time  
20 period.

21 Q. Fair enough. And that was based on flowline testing  
22 records that you reviewed; correct?

23 A. Yes. They had had -- they provided some flowline  
24 testing records in the early 2011 time period. Maybe it was  
25 '12. I can't remember exactly the dates.

1 Q. And Mr. Kinworthy, am I right that you do not have any  
2 information showing or any reason to believe that HVI's  
3 secondary compliance at its facilities is not currently in  
4 compliance? I'm sorry. Secondary containment at its  
5 facilities.

6 A. As of the time of the 2014 site visit, uh, we noticed  
7 compromises in secondary containment at facilities there.

8 Q. Let me ask you to take a look at page 79 of your  
9 deposition line 8 through 13.

10 "Q. Do you have any information or any reason to  
11 believe that Greka's secondary containment at its facility is  
12 not currently in compliance?

13 "A. I have no information, um, however, at our  
14 December 2015," I assume you mean visit, "as illustrated by a  
15 couple of the pictures in here, there was some compromise at  
16 some of the locations, but as an overall at that time, they  
17 were all in good shape."

18 A. I think that's exactly the answer I gave you a second  
19 ago, too.

20 Q. Fair enough. Do you agree that all of the HVI SPCC  
21 plans you have reviewed since the 2010, 2011 time period are  
22 fully compliant with applicable laws and regulations?

23 A. The -- I never had a -- a role in the legal  
24 interpretation of the requirements. All I was simply looking  
25 at from the 2010, 2011 time period is that their efforts had

1       been expended so that they improved their plans. In other  
2       words, I saw it from a cost benefit -- not a cost benefit --  
3       from an avoided cost.

4       Q. Let me ask you to take a look at page 84 and 85 of your  
5       deposition, Mr. Kinworthy at lines 23 through 85-1.

6               You were asked:

7               "Q. Do you believe that the current SPCC plans  
8       that you reviewed as part of your work on this case are  
9       sufficient to comply with legal requirements?"

10              And your answer was:

11              "A. Yes."

12              Was that accurate testimony?

13       A. Yes.

14       Q. Is it correct, Mr. Kinworthy, you do not have any reason  
15       to believe that any of HVI's tank or pond high-level alarms  
16       are currently inoperable?

17       A. I have no knowledge.

18       Q. Mr. Kinworthy, regarding the spills associated with  
19       alarm problems, you believe that HVI has corrected all of the  
20       problems. True?

21       A. I have no knowledge.

22       Q. Let me ask you to take a look at your deposition page  
23       117 lines 17 through 21. You were asked:

24              "Q. Do you have any reason to believe that at the  
25       time of the three spills you discussed, in talking about the

1 alarms, that Greka did not correct those alarm problems?

2 "A. I believe they corrected them all, yes."

3 A. Yes.

4 Q. Is that accurate testimony?

5 A. Yes.

6 Q. Mr. Kinworthy, you are not aware of any evidence that  
7 HVI failed to pressure test any flowline after a spill event.  
8 True?

9 A. Repeat the question. I'm sorry.

10 Q. Sure. Mr. Kinworthy, you are not aware of any evidence  
11 that HVI failed to pressure test any flowline following a  
12 spill event?

13 A. That's true.

14 Q. Mr. Kinworthy, to your knowledge, based on hydrostatic  
15 test results provided to you has HVI been in compliance with  
16 DOGGR requirements of Division of Oil and Gas and Geothermal  
17 Resources, um, requirements for periodic pressure testing  
18 since 2010?

19 A. I'm aware that they had testing performed from 2010 to I  
20 want to say 2012, but I have no idea since then.

21 Q. And you're not aware of any facility at HVI that is  
22 currently missing an SPCC plan?

23 A. I am not.

24 Q. And you don't have any knowledge or opinion about  
25 whether HVI's employees currently are being trained as

1 mandated in the SPCC plans; correct?

2 A. I have no knowledge.

3 Q. You agree as well, right, that facility flowline maps  
4 contain annotations showing the approximate installation  
5 dates of flowlines would comply with the DOGGR regulatory  
6 requirement. True?

7 A. Um, except they do not include the idle lines.

8 Q. Other than that?

9 A. Uh, they are done --

10 Q. On the active lines.

11 A. I, obviously, have not field verified that, but they  
12 provided us a plan. They identify a bunch of active lines  
13 there, but I have no idea if they're all included or not to  
14 be honest because I never field verified it.

15 Q. Do you have any evidence of any spills on the HVI  
16 facilities as a -- from, uh, flowlines since December 31st,  
17 2010?

18 A. Other than what Pete Reich talked about earlier today,  
19 those are the only ones. I haven't done any research on  
20 that.

21 Q. I wanted to ask you about certain of your compliance  
22 opinions. Mr. Kinworthy, do you agree that there's no  
23 federal or state law that requires pipelines to be marked as  
24 set forth in the Pipeline Integrity Management Plan?

25 A. There is no regulatory requirement, however Greka did

1 develop their plan, submitted it to the agency and basically  
2 indicated they were going to do that.

3 Q. Mr. Kinworthy, do you agree that there's no federal  
4 state law or regulation that requires an operator to assess  
5 idle flowlines?

6 A. If you mean by idle a line that has not been properly  
7 abandoned, yes.

8 Q. And it's true, right, that there is no federal or state  
9 law or regulation that requires an operator to inspect all  
10 active flowlines monthly by walking the lines?

11 A. There is no regulatory requirement, correct.

12 Q. And you agree that neither the American Petroleum  
13 Institute nor the American Society of Mechanic Engineers  
14 their recommendations carry the force of law. You don't  
15 believe that; right?

16 A. Correct.

17 Q. And you agree that in prior to 2010, uh, there was no  
18 requirement, legal requirement, to identify the location of  
19 idle flowlines?

20 A. Repeat the question. I'm sorry.

21 Q. Do you agree that prior to 2010, there was no legal  
22 requirement to identify the location of idle flowlines?

23 A. There was no legal requirement. You're absolutely  
24 correct in that. However, it was a common practice in the  
25 industry. For example, Unocal identified them as early as

1 the 1950s.

2 Q. Mr. Kinworthy, is it true that prior to 2010, there was  
3 no federal requirement for a written flowline maintenance  
4 plan?

5 A. In the -- in regards to the DOGGR regulations? Is that  
6 what you're asking?

7 Q. Uh, I'm asking about the federal requirements.

8 A. Repeat the question again. I'm sorry.

9 Q. Mr. Kinworthy, is it true that prior to 2010, there was  
10 no federal requirement for a written flowline maintenance  
11 plan?

12 A. The SPCC requirements do include that there has to be a  
13 flowline assessment plan, program.

14 Q. Let me just ask you about your deposition on page 127  
15 lines 2 through 6.

16 "Q. Prior to 2010 there was no requirement of a  
17 written flowline maintenance plan, was there?

18 "A. From the federal government?

19 "Q. Yes.

20 "A. Correct."

21 Does that refresh your recollection?

22 A. Yes, it does.

23 Q. So there was no requirement; correct?

24 A. Not for the plan, but for actually the program.

25 Q. You do not have any information about or know about



1 whether HVI identified the location of an assessed flowlines  
2 of Battles prior to August 2010; is that correct?

3 A. I'm sorry. Repeat the question.

4 Q. Sure. You do not have any information about or do not  
5 know whether HVI identified the location of and assessed the  
6 flowlines of Battles, the Battles facility, prior to  
7 August of 2010?

8 A. That's true.

9 Q. Do you agree that HVI is not obligated by regulatory  
10 requirements to identify an inactive flowline at a closed  
11 facility?

12 A. If you -- define inactive in your interpretation.

13 Q. One that isn't -- that no fluids are flowing through.

14 A. I would not agree with that at all because idle lines  
15 have historically had releases at the Greka facilities. I  
16 can name several, for example, on the Cow lease. If they  
17 have fluids in them, they still have the potential to  
18 release.

19 Q. How about if I define it as ones that don't have any  
20 fluid in it?

21 A. If they're completely abandoned, properly closed, I  
22 would agree with that.

23 Q. Is it true that you don't have any evidence that HVI  
24 failed to conduct the required pressure tests after any of  
25 the spill events described in the complaint?

1 A. The spill events on the flowlines is that what you're  
2 talking about?

3 Q. Yes.

4 A. That's correct.

5 Q. Did you, um, because there was no evidence one way or  
6 the other, did you assume that HVI failed to perform required  
7 pressure tests following the spill events described in the  
8 complaint?

9 A. That's a confusing question. I'm sorry. Repeat it.

10 Q. Sure. Because you had no evidence one way or the other  
11 as to whether HVI had performed required pressure tests  
12 following the spill events that you assumed they did not?

13 A. I did not assume that, no.

14 Q. Let me ask you to take a look at your deposition  
15 page 146 lines 8 through 18. You were asked:

16 "Q. What is your evidence that Greka failed to  
17 conduct pressure testing of these lines following replacement  
18 of the portion involved in the spill?

19 "A. I have no evidence that they performed it or  
20 not. That they did not perform it.

21 "Q. But you're assuming that they failed to;  
22 correct?

23 "A. Correct.

24 "Q. Even though there's no evidence to suggest  
25 that they did not do it?

1 "A. Correct."

2 Was that accurate testimony?

3 A. You know, during deposition as you know, you get tired.  
4 I obviously erroneously made that statement. I have no  
5 evidence one way or the other whether they ever did the test.

6 Q. I never get tired in deposition.

7 Do you agree that there's not any regulation  
8 requiring an operator to take existing flowlines and elevate  
9 them onto stands?

10 A. A requirement?

11 Q. Correct.

12 A. The DOGGR does have in the regulations that they  
13 recommend that practice and it has become much more common in  
14 the industry.

15 Q. But it's just recommendation not a requirement. True?

16 A. That's correct.

17 Q. Prior -- uh, strike that.

18 Absent direction from DOGGR and for the record,  
19 this is a reference to a California state regulatory scheme?

20 A. Yes.

21 Q. Absent direction from DOGGR, do you agree that the law  
22 only requires mechanical integrity testing in flowlines every  
23 ten years?

24 A. That's correct.

25 Q. Prior to 2010 was the only regulatory requirement for

1 pressure testing to test a flowline after a spill?

2 A. That's correct.

3 Q. Do you agree that there was no law or regulation in  
4 effect prior to 2010 requiring periodic pressure testing of  
5 flowlines?

6 A. That's correct.

7 Q. Mr. Kinworthy, is it correct that none of your cost  
8 estimates as compiled in Exhibit D to your report reflect  
9 costs that HVI avoided by failing to comply with a specific  
10 law or regulation?

11 A. I'm not sure that's a true statement.

12 Q. You don't know one way or the other right now?

13 A. Well, it depends on which requirement you're talking  
14 about or which recommendation you're talking about.

15 Q. Mr. Kinworthy, you're not offering an opinion that HVI  
16 avoided compliance with any law or regulation by not having a  
17 third party inspect or conduct annual tests as listed in  
18 Item 8 page 3 of Appendix D?

19 A. That's true.

20 Q. Mr. Kinworthy, I just wanted to show you Exhibit C to  
21 your expert report which has been marked as U.S. 3213.

22 And Mr. Kinworthy, just looking at the standards  
23 there that are referenced on the left-hand side of Appendix  
24 C, these are the authority for your recommendations; correct?

25 A. That along with my experience, yes.

1 Q. Uh, so there's a reference to 40 CFR Part 112.9(d)(4)  
2 and API Practice 570 for the Pipeline Integrity Management  
3 Program; right?

4 A. Yes.

5 Q. And with respect to Flowline Inspection, Assessment and  
6 Monitoring, you're talking about 40 CFR 112.9(d) again. 570,  
7 API 570. API 579-1. ASME FFS-1. DOGGR regulation  
8 Subchapter 2, Article 3 Section 1774.1(a); is that right?

9 A. Yes.

10 Q. And with respect to your Containment and Diversionary  
11 Structures, you're referencing 40 CFR Section 112.7(c);  
12 correct?

13 A. Yes.

14 Q. And, again, 40 CFR Section 112.9?

15 A. Um, yes.

16 Q. Do you know when the last time that those regulations in  
17 the U.S. Code of Federal Regulation were changed?

18 A. I want to say they were finalized in 2011.

19 Q. Did they include the specific requirements that you  
20 recommend here?

21 A. As of what time?

22 Q. As of the time they were amended.

23 A. I believe so.

24 MR. SULLIVAN: No further questions. Thank you.

25

REDIRECT EXAMINATION

BY MS. MO:

Q. Good afternoon, Mr. Kinworthy.

Did you have a copy of your deposition transcript in front of you?

A. I do.

Q. You do. Do you remember being asked about whether or not, um, about any assumption made about testing performed after a spill?

A. I remember that, yes.

Q. If you turn to page 146 and looking at lines 19 to 23, does that look like your testimony about that topic?

A. Yes.

Q. Does that refresh your recollection about what you meant by your earlier testimony?

A. Yes.

Q. And so how did you draw a conclusion about whether or not any pressure testing was done after a Greka spill?

A. Based, obviously, based on my answer there, I had seen no evidence at all presented to us that I had been able to review to show that they had actually done it.

Q. Do you know whether or not pressure testing records were requested in this case?

A. They definitely were.

Q. Did you review those records?

1 A. Uh, only the ones that were provided.

2 Q. Now, you were just asked about some of the  
3 recommendations you make in your Appendix C which is exhibit  
4 U.S. 3213?

5 A. Correct.

6 Q. First, let me start off generally. What's the reason  
7 that you make these recommendations?

8 A. I make these recommendations, uh, that are obviously in  
9 most cases more stringent than the regulatory requirements.  
10 And the main reason for that is both the age of the  
11 facilities and the way it's been operated and run.

12 Uh, as an example, if you look at some of these  
13 things dealing with flowlines, previous operators like Unocal  
14 and Saba have been utilizing corrosion inhibitors to help  
15 protect the lines so they would not corrode and lessen.  
16 However, when Greka operated it from the time they took on,  
17 for example, the Bell lease until 2009, they did not use any  
18 corrosion inhibitors. I don't know what their rationale was  
19 for that, but it was obviously not extra protective of the  
20 lines.

21 Q. And are there any industry standards that you base your  
22 recommendation on that are more stringent than regulations?

23 A. Absolutely. I mean, for example, in just talking about  
24 flowlines as an example. Back in about 1983 time period, I  
25 developed a plan or a manual for how to develop an SPCC plan.



1 And in that we took the basic requirements of the regulation  
2 and then enhanced it so that we could be more protective of  
3 the environment and also focus really on prevention.  
4 Somewhat also on the response.

5 And so we distributed that, for example, to all the  
6 Unocal facilities throughout the United States. And as an  
7 example of that, we always looked at okay, what do we really  
8 need to do and be specific to protect a release from  
9 happening?

10 And part of it is corrosion inhibitors. Part of it  
11 is, uh, the way you inspect things. Part of it is -- there's  
12 all sorts of elements there. How often should you test?  
13 Those type of things. And we gave directives basically to  
14 our operating groups this is what a good plan would be.

15 Unfortunately, in the SPCC plans we saw in the  
16 early days of the Greka, they make general statements. They  
17 didn't have any specific information or knowledge or  
18 direction to a lot of these things to make sure that they  
19 were going to be protected.

20 Q. How long has a written flowline maintenance program been  
21 industry standard?

22 A. The elements of it have been around forever. As I  
23 mentioned earlier, um, Harlan Felt of Greka had identified  
24 that at the Bell lease Unocal had already mapped all of their  
25 flowlines at that lease as an example. Um, because I was

1 with Unocal at one time, I remember auditing that facility up  
2 there and that was, you know, an exemplary step that they  
3 took. It's been a common practice in the industry for many  
4 years.

5 Q. Do you remember being asked earlier specifically about  
6 monthly inspections by walking the flow lines?

7 A. That's correct.

8 Q. First, what's the reason that you recommend that the  
9 inspection be done by walking?

10 A. There's -- uh, it's very similar to what I answered a  
11 little bit before. You have very old lines there. They have  
12 had a lot of, um, operation, been run hard. The daily  
13 drive-by's are almost, I mean, it's a common practice, but  
14 they're not the most protective.

15 They're basically reactionary. Because as you're  
16 driving down a dirt road, you're making sure you're going 10,  
17 15 miles an hour. You're not going real fast, but you're  
18 making sure you stay on the road and not go off in a ditch or  
19 off a hill. In addition in most of the Greka facilities,  
20 they have multiple flowlines right next to the road and in  
21 some cases, there may be five or six of them.

22 If they're covered with dirt, all you're gonna be  
23 able to see is actually if there is a release. You can't see  
24 if it's pitted. You can't see if it's been damaged by a rock  
25 falling on it. You can't see anything. So therefore it's

1 important in my opinion based on my experience that you  
2 should walk these a little more often than what's required by  
3 regulatory requirements.

4 Um, the other part of this is it should also  
5 identify areas of maintenance. Obviously, if a line is  
6 halfway buried, you can't see anything.

7 Q. And what's the reason that you recommend that these  
8 inspections take place monthly?

9 A. You know, I debated back and forth how often the  
10 frequency is, but I think monthly is adequate. I think it  
11 will be able to help the operators identify any damage to the  
12 outside of the lines, and it's not a huge burden. A typical  
13 field operator goes down to visit each well during the day  
14 and spends most of the time back at the tank battery.

15 I, you know, I traveled with these guys many times.  
16 In fact, my boss was probably one of the smartest bosses I  
17 ever had at Unocal because the first six months, I didn't do  
18 any environmental work. He gave me to the field operator and  
19 said teach this guy how a field operation goes.

20 And so they would spend a lot of time and have some  
21 dead time whether reading magazines or stuff like that. So  
22 to walk a line, you know, once a day or something like that  
23 until you have all of them during a monthly period, I don't  
24 think is unreasonable.

25 Q. Are there any Greka spills that you can think of that

1 would have been avoided or mitigated if these inspections  
2 would have been done?

3 A. Um, most certainly. For example, the one that occurred  
4 at the Bell lease, the first flowline example. I'll use that  
5 one as an example. Um, the operator must have gone by that  
6 release point at least once or twice. Now, we don't know  
7 exactly what time it started so maybe it happened after his  
8 shift. I have no idea.

9 But when we did our 2014 site visit, we asked the  
10 operator who was actually -- an operator who was with us at  
11 the time which of these lines is the one that had the  
12 release. And there was, I think, there was five lines there  
13 and he couldn't answer the question. He instead had to walk  
14 up the hill a ways until he could finally figure out which  
15 line it was and he came back and identified well, it's this  
16 one. So if you're doing a drive-by, how are you gonna see  
17 it? It's just not practical.

18 Q. And moving on to some of your other recommendations, for  
19 example, you were also asked about a third party compliance  
20 audit.

21 A. Yes.

22 Q. What's the reason you recommend that Greka undertake a  
23 third party compliance audit?

24 A. Basically, starting in the 1980s, most of the oil  
25 industry started using an independent party to come in and

1 assess their operation for compliance. Sometimes it's  
2 environmental, sometimes it's health and sometimes it's  
3 safety. I personally ran Unocal's program until I left  
4 and -- the company. And we would visit every one of our  
5 sites with independent people to try to assess how they're  
6 complying and then give them recommendations for improvement.

7 Q. And how long has that been industry standard?

8 A. It's been common in the industry since the 1980s. And  
9 it's primarily based because of the DOJ. They scared the  
10 heck out of us cause they started an environmental crime  
11 section and said we're gonna nail you if we can.

12 Q. Do you recall also being asked about mapping of  
13 flowlines?

14 A. Yes.

15 Q. Has -- and I believe, uh, you were asked about mapping  
16 of active flowlines.

17 A. Correct.

18 Q. Um, do you have any opinion about the need for mapping  
19 idle flowlines or inactive flowlines?

20 A. Yes. Obviously, idle lines still have the potential  
21 with fluid inside them that could be released. Basically, an  
22 idle line is a pump, a well for whatever reason is not  
23 operating at the present time. It could be shut in for  
24 whatever reason. But it still has fluid within the line that  
25 would transport down to the tank farm. Um, the line can also

1 be utilized and restarted at any time.

2 Plus, you have the history of the Greka facility  
3 having several of these flowlines that were quote, unquote  
4 "idle" having releases. And if you look at Harlan Felt's,  
5 um, investigation of the number of releases they had during  
6 this time period, it was a huge number. It was well over  
7 150. And most of them, the majority of them were on  
8 flowlines.

9 Q. And sticking with flowlines, your recommendations at the  
10 bottom of the first page, you were asked about flowline  
11 elevation surveys. Do you remember that?

12 A. Yes.

13 Q. What's the reason that you recommend -- well, first,  
14 let's start what's the purpose of the flowline elevation  
15 survey?

16 A. The chemical contractors that Greka engaged in I want to  
17 say around 2009 made a number of recommendations for the Bell  
18 lease. What happens is an elevation survey simply finds the  
19 low spot in the line where water can accumulate and stagnate  
20 for lack of a better term. And so therefore, it has more of  
21 an ability to corrode the line.

22 Q. Was flowline corrosion a cause of any Greka's spills?

23 A. Many of them.

24 Q. And are some of those spills listed in your  
25 recommendations table?

1 A. Absolutely, yes.

2 Q. And that would be, uh, taking a look at the screen which  
3 spills are those?

4 A. It's the July 16, 2007 Bell facility one. The  
5 January 29, 2008 spill from the Bell facility.

6 Q. And you also say there are several other spills from the  
7 Bell facility.

8 A. That's correct.

9 Q. Thank you.

10 A. And, again, if you look at Harlan Felt's survey, I think  
11 he added something in the order of 60 percent of -- of the  
12 releases were from flowlines. Obviously, most of those were  
13 probably corrosion.

14 Q. You were also asked about API recommendations.

15 A. Yes.

16 Q. Do you remember that?

17 A. Yes.

18 Q. What is API?

19 A. American Petroleum Institute.

20 Q. Is it industry standard to follow API recommendations?

21 A. It's a great recommendation based on many years and  
22 history of operating fields so yes. It would be a standard  
23 practice.

24 Q. And you've been asked a lot today about things that were  
25 required and weren't legally required. Why do you still



1 maintain your recommendations to -- for Greka to do things  
2 that seem not to be clearly required by the law?

3 A. I have a couple of issues and in regards to as I talked  
4 before about the age, the way the facilities have been run.  
5 But you also have a number of issues that are -- a prudent  
6 operator probably wouldn't do.

7 As an example in 2002, Susan Whalen, legal counsel  
8 for Greka, told the State Attorney General for the Fish and  
9 Game that they were gonna develop a flowline program right  
10 away. You look at various testimonies from Greka employees.  
11 They keep saying they're going to do it. They keep saying  
12 they're gonna do it. You have it from 2005. You have it  
13 from 2006 to 2007 and it's really not developed until 2010.

14 Um, in addition, I have never seen an operator who  
15 receives some deficiencies kind of ignore 'em. Again, you  
16 look at the County Petroleum's Engineer. Prior to the first  
17 Zaca release, they had done an inspection a year before and  
18 cited them with a number of deficiencies.

19 Most of them were actually safety issues which to  
20 me is even more important because you're talking about  
21 humans. But as of the Zaca spill in December of 2005, if  
22 that's the correct date, I think it is, um, the county came  
23 out again and cited for the same thing so you have that.

24 In addition, if I was an engineer who was  
25 certifying these plans, once I got that first SPCC inspection

1 and they find out all these issues, why would you not go to  
2 all your other facilities and update those plans, too?

3 Instead, they waited until the EPA inspectors got there so  
4 they were always reactionary not proactive at all.

5 Q. Have you seen any indication that that has changed in  
6 recent years?

7 A. Well, as we said before, both in our 2014 visit and my  
8 2016 visit of the Chamberlin lease, we still saw flowlines  
9 covered up. We still saw the secondary containment  
10 compromised. So I understand that the EPA inspectors had  
11 said they have improved, but obviously not all the way yet.

12 MS. MO: Thank you. Nothing further.

13 RECROSS-EXAMINATION

14 BY MR. SULLIVAN:

15 Q. Mr. Kinworthy, with regard to monthly inspections by  
16 walking the flowlines, would you agree that both the utility  
17 and the burden of monthly walks are impacted by the miles of  
18 pipeline and the terrain that they cross?

19 A. No, I would disagree with that statement. I believe  
20 it's not that burdensome.

21 Q. Even if it's inaccessible country that you don't want to  
22 disrupt by constantly walking through it?

23 A. Most of the lines are adjacent to the -- to the road, a  
24 majority of them by far. And there will be areas, obviously,  
25 you may not be able to do, but at least a majority of it you

1 should be able to accomplish.

2 Q. Mr. Kinworthy, in Southern California are there  
3 frequently flowlines that are completely buried under  
4 roadways?

5 A. Yes.

6 Q. Are those visible in any fashion?

7 A. No.

8 Q. Could you possibly monthly walk them?

9 A. You wouldn't have to. They're typically across a  
10 roadway. It's not that wide. So it's not -- it's not  
11 possible to do it. You're absolutely right.

12 Q. And are there other mechanisms to insure that those --  
13 the integrity of those flowlines; right?

14 A. Correct.

15 Q. In fact, you know, it's quite common for major pipelines  
16 containing, you know, toxic and other material to be buried  
17 underground where you can't seem; right?

18 A. In production?

19 Q. Just in general, life in general.

20 A. Well, if they do, they have to have external corrosion  
21 protection, yes.

22 Q. Certainly, most pipelines that you're familiar with,  
23 that we're all familiar with are buried underground; right?

24 A. It just depends on what industry you're talking about.  
25 Some, yes.

1 Q. Most of them are water pipelines are underground.

2 A. Again, they have protection to 'em.

3 Q. Are there spills from flowlines at the U-Cal facilities?

4 A. There were.

5 Q. Are there now?

6 A. Uh, no.

7 Q. None?

8 A. As far as I understand, there's none.

9 Q. What would you try to do to determine if there were  
10 spills currently from any of the U-Cal facilities?

11 A. I would, in my case I would look at the OES report to  
12 see if it's been reported.

13 Q. You'd just go on the California Office of Emergency  
14 Services website and just check it out?

15 A. That's one way. Otherwise, I'm not at the site. I have  
16 no idea.

17 Q. Would another way be to go to the National Response  
18 Center and see if there were any reports of spills that  
19 impacted any navigable waterways of the United States?

20 A. Correct.

21 MR. SULLIVAN: Thank you.

22 MS. MO: May I briefly?

23 THE COURT: Yes.

24

25

FURTHER REDIRECT EXAMINATION

BY MS. MO:

Q. Mr. Kinworthy, does Greka still own the U-Cal facility?

A. No.

Q. Do you remember how long ago they sold that?

A. Off the top of my head, I want to say it's around probably the 2010 time frame, but I'm not certain.

Q. So you're not making any recommendations about U-Cal?

A. No.

Q. You were also asked about where Greka's flowlines are. Based on your knowledge, the documents you've read and your own site visits, can you describe how many flowlines are above ground?

A. By far the majority. A very large percentage. I would say probably in the order of 90, 95 percent.

Q. Do you remember how many of those flowlines you saw were buried or partially buried?

A. You know, this is testing my memory now. Um, I do know that occasionally you would see one that would go underneath a road. But you would see it here on the surface, go underneath the roadway, and then reappear on the other side. I saw some, but I don't know how many.

Q. Do you remember seeing lines covered with vegetation?

A. Yes.

Q. You remember seeing lines covered with debris?

1 A. Yes.

2 Q. Why does it matter -- let me go back to your  
3 recommendations. Do you make any recommendations  
4 specifically as to lines that are buried or partially buried  
5 or covered in vegetation or debris?

6 A. Yes, that they obviously be freed of that. And the main  
7 reason for that, none of these flowlines have typically  
8 external corrosion wrapping or stuff like that. So therefore  
9 the soil and the other things in the soil can corrode it from  
10 the outside. Slowly start pitting it until finally it  
11 diminishes the thickness of the line.

12 Q. And if a line is buried and not visible for inspection,  
13 how do you recommend a company maintain that line?

14 A. I'm sorry. Repeat the question.

15 Q. If a flowline isn't visible for inspection, for example,  
16 it's buried how should a company maintain that line? Is  
17 there any testing such as pressure testing?

18 A. Well, they will do pressure testing under the DOGGR  
19 requirements now so that would be the main way.

20 Q. And what's your recommendation as to the frequency that  
21 Greka should do pressure testing?

22 A. I had recommended on a five-year basis for the  
23 non-environmentally sensitive ones. Um, the environmentally  
24 sensitive ones are required every two years. The DOGGR  
25 regulations require non -- ones outside the sensitive areas

1 on a ten-year basis. I'd recommend on a five-year basis  
2 again based on the age and how the lines had been run.

3 MS. MO: Thank you. Nothing further.

4 MR. SULLIVAN: Just a couple more questions.

5 FURTHER RECROSS-EXAMINATION

6 BY MR. SULLIVAN:

7 Q. Do you have any evidence, Mr. Kinworthy, that currently  
8 HVI's pressure testing is not done every five years or every  
9 two years in full compliance with DOGGR regulations?

10 A. I have no knowledge, correct.

11 Q. I misspoke. At Union Oil are there any flowline spills  
12 that you're aware of?

13 A. During my tenure when I was there, I remember one.

14 MR. SULLIVAN: Thank you.

15 MS. MO: May I have one more?

16 THE COURT: Yes.

17 THE WITNESS: Can I cry now?

18 FURTHER REDIRECT EXAMINATION

19 BY MS. MO:

20 Q. Mr. Kinworthy, you've responded no knowledge, you have  
21 no knowledge to a few questions now. Uh, so what does that  
22 mean? Why do you say that?

23 A. I have not looked at any information, uh, regarding any  
24 items basically since 2010 other than just a handful and my  
25 site visit.



1 Q. You don't have any, um, indications that Greka has  
2 implemented your recommendations, do you?

3 A. I believe based on the testimony, they are now doing the  
4 hydrostatic testing on a five-year basis.

5 Q. Anything else?

6 A. Not that I know of.

7 MS. MO: Thank you.

8 MR. SULLIVAN: Nothing further.

9 THE COURT: I have questions.

10 EXAMINATION

11 BY THE COURT:

12 Q. So let me ask was it -- you talked about Unocal earlier  
13 in identifying the flowlines and there was no requirement.  
14 Um, I understand that in -- there was a -- that Greka was  
15 under a state court injunction from 2005 to plug the -- and  
16 abandon idle oil wells.

17 And what does that mean to plug and abandon idle  
18 oil wells?

19 A. To actually abandon it?

20 Q. Well, from what I understand, that they were sued by  
21 Unocal. So one oil company basically suing another oil  
22 company to clean up because Unocal had sold this property or  
23 a lot of the wells any way.

24 Do you have any knowledge of that?

25 I keep hearing a lot about legal requirements and

1 what was required. And so I guess I'm trying to understand  
2 whether there was any legal requirements. I know that there  
3 was a specific performance and injunction by a state court  
4 judge for five years and I'm wondering whether they complied  
5 with that.

6 A. Unfortunately, Your Honor, I have no knowledge.

7 Q. Okay. And so now when they asked about the -- people  
8 talked about the obligations prior to 2010. Um, why is that  
9 date being used, the obligations of 2010?

10 A. DOGGR started promulgating this regulations for  
11 flowlines integrity maintenance plans.

12 Q. Tell me again what DOGGR stands for. I know you guys  
13 have said that earlier.

14 A. It's a state agency called the Department of Oil and Gas  
15 and Geothermal Resources. So it's the one that sort of  
16 dictates to the operators the requirements dealing with wells  
17 and all of the operations.

18 Q. And do they issue sort of remediation orders and things  
19 like that if necessary?

20 A. Um, I think it has happened, but it's rare. Uh, the  
21 main thing is once you abandon a lease, there are  
22 requirements of how you abandon it and how you take  
23 everything away.

24 Q. Okay. What's the difference between DOGGR and earlier I  
25 allowed this Exhibit 130 in by -- who is this from, Counsel?

1 MR. SULLIVAN: It's the California Office of  
2 Emergency Services.

3 BY THE COURT:

4 Q. What is the difference between that and DOGGR?

5 A. Well, DOGGR is the regulatory body over the oil and gas  
6 production offshore in state waters and onshore. Um, the OES  
7 is simply a repository. It's like a reporting center. So  
8 people report spills to them. They then disseminate the  
9 information out to, you know, fire departments, Fish and Game  
10 or whatever is appropriate.

11 You also get reports, you know, for example, a  
12 tankard truck has a spill on a highway that would be  
13 reported, too. So it's various bodies. They will basically  
14 try to tell everybody about it.

15 Q. And for purposes of injunctive relief, um, so typically  
16 when I have implemented injunctions or ordered injunctions in  
17 cases, um, I have often appointed a monitor who reports to me  
18 and I approve when I get recommendations and they -- and I  
19 give them a lot of authority to operate independently.  
20 They're an independent monitor.

21 Assuming I were to rule in favor of the plaintiffs  
22 here, um, is that something that you think might be  
23 appropriate as a type of injunctive provision here?

24 A. Uh, that's one possibility, yes. The other one, of  
25 course, is possibly all this be reported directly to EPA who

1 forwards it to you. There's options.

2 THE COURT: Well, I don't know about dealing with a  
3 government agency. (Laughter).

4 It's been very effective dealing with monitors in  
5 the past, but I've done them in other settings. And these  
6 kinds of cases often, that I'm aware of, don't often go to  
7 trial. Okay. So I think that's all my questions.

8 Thank you very much.

9 Any other questions?

10 MS. MO: No.

11 MR. SULLIVAN: No.

12 THE COURT: The witness is excused.

13 You know, why don't we take our afternoon recess  
14 because we are gonna end at 4 o'clock today. I think there  
15 might be a baseball game that everybody wants to make it to.

16 THE CLERK: This court's in recess.

17 (Recess taken.)

18 THE COURT: Okay. Ready to call your next witness?

19 MR. FORSYTHE: Yes, Your Honor.

20 Plaintiffs would like to call our next witness,  
21 Dr. Joan Meyer, to the stand.

22 THE COURT: By the way, defense, you have  
23 32 minutes left. I'm gonna give you an extra hour.

24 MR. DIAMOND: Thank you.

25 THE COURT: Okay.

1 MR. DIAMOND: Much appreciated.

2 THE COURT: Okay.

3 THE CLERK: Please raise your right hand.

4 (Witness sworn.)

5 THE CLERK: Thank you. Please have a seat.

6 Would you please --

7 MR. FORSYTHE: Your Honor, the Court has issued an  
8 order at Docket No. 443 entering a joint stipulation of the  
9 parties under which HVI agreed to abandon certain arguments.  
10 Conditioned on the parties' agreement to withdraw or not  
11 introduce related evidence, Dr. Meyer's testimony will  
12 proceed subject to that order.

13 THE COURT: Okay.

14 MR. FORSYTHE: May I approach the witness?

15 THE COURT: Yes.

16 THE CLERK: Please state your name for the record  
17 and spell your last name.

18 THE WITNESS: My name is Joan Meyer, M-e-y-e-r.

19 MR. FORSYTHE: Please let the record reflect that I  
20 provided Dr. Meyer with a copy of her trial declaration which  
21 was filed as Docket No. 423-1.

22 DIRECT EXAMINATION

23 BY MR. FORSYTHE:

24 Q. Dr. Meyer, is the document you're holding the trial  
25 declaration you submitted in this case?

1 A. It is.

2 Q. And do you understand that portions of your written  
3 testimony were withdrawn under the joint stipulation and  
4 order that I just mentioned, Docket No. 443?

5 A. Yes.

6 Q. And with that understanding, do you adopt paragraphs 1  
7 through 20 of your trial declaration along with Exhibit A to  
8 your trial declaration as your sworn testimony under oath in  
9 this case?

10 A. I do.

11 MR. FORSYTHE: For the record, Dr. Meyer's  
12 declaration was lodged with the court as Docket No. 423-1.  
13 We would also move into evidence at this time the following  
14 three trial exhibits referenced in Docket No. 437, and those  
15 three exhibits are U.S. 2677, U.S. 2634 and U.S. 3214.  
16 Admissibility has been stipulated by the parties.

17 THE COURT: Okay.

18 MR. FORSYTHE: Um, and to clarify, the documents  
19 listed as conditional on pages 10 through 11 of Docket No.  
20 437 are not moved into evidence pursuant to the joint  
21 stipulation.

22 THE COURT: Okay.

23 MR. FORSYTHE: And with that, we tender the  
24 witness.

25 THE COURT: Okay. The declaration and the

1 witness -- and the exhibits are admitted.

2 Go ahead, Counsel.

3 CROSS-EXAMINATION

4 BY MR. SULLIVAN:

5 Q. Good afternoon, Dr. Meyer.

6 A. Good afternoon.

7 Q. You are here to testify today now only about your  
8 economic benefit opinion; right?

9 A. That's my understanding, yes.

10 Q. In your opinion here is that HVI gained an economic  
11 benefit from its alleged noncompliance with the environmental  
12 regulations as claimed by the plaintiff, United States;  
13 right?

14 A. Uh, yes.

15 Q. Now, first, with respect to all of the costs that you  
16 used, did you rely entirely on Mr. Kinworthy's alleged items  
17 of noncompliance as shown by Exhibit D to his report?

18 A. Yes.

19 Q. And if Mr. Kinworthy is wrong on any one of his alleged  
20 items of noncompliance, then your report would also be wrong  
21 with respect to these specific items; correct?

22 A. It's true that if any of his, uh, estimates change, my  
23 economic benefit estimate would change as well.

24 Q. And that would be all run through an interactive Excel  
25 spreadsheet so if you deleted one entry, it should flow



1 through; right?

2 A. It is a -- a model based in Excel as you say. And yes,  
3 I would make adjustments to that model.

4 Q. And, uh, Dr. Meyer, the detailed calculations underlying  
5 your model, those are found in Appendix B; correct?

6 A. Yes.

7 Q. Can you look at page B12 of Appendix B in Plaintiff's  
8 Exhibit No. 2677?

9 A. Yes.

10 Q. So Dr. Meyer, this shows that itemized in row 5, the  
11 \$5,774,283 out of our calculated economic benefit is to -- is  
12 due to the alleged avoided recurring costs; correct?

13 A. That's right.

14 Q. Okay. And this amounts to 91 percent of your estimated  
15 economic benefit; right? About 91 percent?

16 A. I would have to do the math. You need to add together,  
17 uh, what appears on rows 1 and 2. Adding --

18 Q. If we just take the 5,774,283 and divide it by \$6,317 --

19 A. Yeah. You want me to do it? Yeah, that's approximately  
20 90 percent.

21 Q. I did it a couple of times, but I think it comes to  
22 91 percent. Dr. Meyer, can you turn to page B-64 of  
23 Exhibit 2677? And column D here, that's where you describe  
24 the items that you use for the alleged cost savings from  
25 noncompliance; right?

1 A. Yes.

2 Q. And, again, those all came from Mr. Kinworthy?

3 A. Yes.

4 Q. Okay. It's the only way I could do it. Could you turn  
5 to page B-87? So I wanted to just flip back to page B-83 to  
6 87. And I apologize for having to do it this way, but I am  
7 right that this Excel printout would be many pages wide, um,  
8 if you weren't actually printing the pages out one by one?

9 A. Yes.

10 Q. In other words, 83 to 87 really are one page, but they  
11 print on four pages?

12 A. That's right. Columns A through H appear on the  
13 printout, and it's columns on page B-83, I, J, K and L that  
14 differs, and on B-87, you can see it's Y through double B.

15 Q. Out of curiosity, Dr. Meyer, why didn't you sum across  
16 so you can see the sum of the rows across on your actual  
17 exhibit?

18 A. Uh, I would have to look, but I'm not sure -- there's a  
19 time dimension to the cost profile for each one of these --  
20 these actions, you know, that's represented by a row, and so  
21 you need to adjust for the time value of money.

22 Q. But I think you do the adjustments after.

23 A. Um, it's -- I'd have to go through. It certainly  
24 appears -- you know, I'm not quite sure where . . .

25 Q. Well, if you look at --

1 A. B-83 and 87 occur, whether, that -- oh, it is present  
2 value. Yes, you're right. There is a -- these are present  
3 values. Thank you.

4 Q. So do you know why you didn't sum them across?

5 A. Uh, I can't tell you.

6 Q. It just -- was hard for me to figure out. Um, and so  
7 column D there, is it your recollection most of the avoided  
8 recurring costs relate to claims that there should have been  
9 a regular program of flowline maintenance?

10 A. That I don't know; however, to explain what avoided  
11 recurring cost is, would that help.

12 Q. I don't need that. I'm just trying to figure out, I  
13 understand clearly what that is, what are the major inputs  
14 that went into avoided recurring costs? I know what you're  
15 identifying as an avoided recurring cost, but what are the  
16 items primarily comprised of?

17 A. Okay. These would be periodic actions that should have  
18 been taken. Um, whether it's regular tests on the alarm  
19 system or regular program of flowline maintenance, these are  
20 things that should have occurred say every other year, every  
21 five years.

22 Q. Sure, and that's assumptions you're making based upon  
23 Mr. Kinworthy's work. Is it true that there are only really  
24 two avoided recurring costs? Number one, items alleged  
25 recurring flowline maintenance, and number two, alleged alarm

1 costs?

2 MR. FORSYTHE: Objection, compound.

3 THE COURT: Sustained.

4 BY MR. SULLIVAN:

5 Q. If you look in Item D, is one of the predominant alleged  
6 avoiding recurring costs related to a regular program of  
7 flowline maintenance?

8 A. Yes.

9 Q. And the second one is regular tests performed on the  
10 alarm systems?

11 A. Yes. Whether these are the only two, I would need to go  
12 through and review that more.

13 Q. Do you want to just take a minute and go through one of  
14 the four pages and see if you can identify anything else?

15 A. Those look to be only two types based on my cursory  
16 review.

17 Q. Thank you. Because the calculations aren't contained in  
18 it, and it's like 264 pages, it takes a little bit of, um,  
19 being methodical to try to figure it out, I believe. Um,  
20 okay. So if you could look back at page B-83 for me, please.  
21 And I just want you to focus on the sum of \$395,731 there in  
22 Column J which is your estimate for the year ending  
23 December 31st, 1999.

24 A. Yes.

25 Q. Okay. Then if you would take a look back at the, sorry.

1 Okay. Um, can you look at page B-142? How about B-141?

2 Okay. There it is. So that 395,730.81 is just where that  
3 other comes from, the avoided recurring costs on line 12?

4 A. Yes.

5 Q. Thank you. I just want to make sure that I'm reading  
6 this correctly. So if you eliminated those recurring costs  
7 then, as you said, this model would update and adjust the  
8 results accordingly.

9 A. Yes.

10 Q. Dr. Meyer, would you be willing to share with  
11 defendant's counsel these spreadsheets in native format?

12 THE COURT: I think we're done with discovery,  
13 Counsel.

14 MR. SULLIVAN: It's just a question because  
15 otherwise, I don't know how to replicate the spreadsheet.

16 THE COURT: Well, you could read it. Right?

17 MR. SULLIVAN: Okay.

18 No further questions.

19 MR. FORSYTHE: May I have just a moment to confer  
20 with counsel?

21 THE COURT: Yes.

22 MR. FORSYTHE: Uh, no redirect, Your Honor.

23 THE COURT: Okay.

24 Witness is excused.

25 THE WITNESS: Thank you.

1 MR. ZARRO: Your Honor, we're seeking to permission  
2 to call Detective Adam Reichick out of order. If you recall,  
3 he is the rebuttal witness we discussed at the pretrial  
4 conference. He's out in the hall, and I --

5 THE COURT: Okay.

6 MR. ZARRO: -- wanted to let him get back in his  
7 copter.

8 THE COURT: Go ahead.

9 MR. DIAMOND: Your Honor, I just want to say that's  
10 perfectly fine with us, we've been talking about it, but  
11 normally, their rebuttal witness would come even after all of  
12 our witnesses tomorrow. So I only mention that from the  
13 standpoint of trying to figure out how it might flow in terms  
14 of the examinations. I hope you can give us a little leeway  
15 to figure it out.

16 THE COURT: I'll give you a little bit of extra  
17 leeway because this is a bench trial. I wouldn't do this to  
18 a jury.

19 MR. DIAMOND: Understood. Cause I don't know, for  
20 example, what the cross-examination would be for the next  
21 witness so it's hard to anticipate the redirect.

22 THE COURT: Okay.

23 MR. ZARRO: Just for the record, Your Honor, this  
24 rebuttal testimony is directed at Paragraph 55 of Mr. Randy  
25 Greenwald's trial testimony. And as I understand it, do I

1 understand correctly, Counsel, that you won't be calling  
2 Mr. Greenwald?

3 THE COURT: So you're just gonna be resting on his  
4 declaration? Did I see that in the declaration -- the  
5 stipulation?

6 MR. FORSYTHE: Well, subject to the objections to  
7 individual lines of testimony.

8 THE COURT: Oh, yeah, no, I know. That's true for  
9 all the declarations.

10 MR. DIAMOND: It's limited to Paragraph 55.

11 MR. ZARRO: That's what it's rebutting.

12 Thank you, Your Honor. So we will call Detective  
13 Adam Reichick.

14 THE COURT: Go ahead. Okay. Which book is  
15 Mr. Greenwald's declaration in?

16 MR. SULLIVAN: It would be in the pretrial  
17 documents, Your Honor.

18 THE COURT: Okay. You guys are very gracious.  
19 Somebody gave me binders with all the declarations, and  
20 that's been very helpful here.

21 THE CLERK: Please raise your right hand.

22 (Witness sworn.)

23 THE CLERK: Thank you. Please have a seat.

24 Please state your name for the record and spell  
25 your last name.



1 THE WITNESS: Adam Reichick, R-e-i-c-h-i-c-k.

2 DIRECT EXAMINATION

3 BY MR. ZARRO:

4 Q. Good afternoon, Detective Reichick. Can you please tell  
5 us what your current occupation is?

6 A. I am a Senior Deputy Sheriff assigned to the Air Support  
7 Unit for Santa Barbara County Sheriff's Department.

8 Q. Were you part of the Santa Barbara County Sheriff's  
9 Department in January of 2008?

10 A. Yes, I was.

11 Q. What was your position then?

12 A. I was a detective assigned to the Homeland Security and  
13 Organized Crime Unit which was also referred to as Vice  
14 Intel.

15 Q. Vice Intel?

16 A. Short for intelligence.

17 Q. When you were with the Vice Intel Unit, were you asked  
18 to investigate an incident of vandalism at the HVI Cat Canyon  
19 then known as Greka facility in Los Olivos?

20 A. Yes.

21 Q. How did you happen to become assigned to that  
22 investigation?

23 A. Well, I was -- initially, uh, spoke to Private  
24 Investigator Tom Parker, and several days later, I was, uh,  
25 aware that a report was made to the sheriff's department

1 which was initially reported as a suspicious circumstance or  
2 at least that's the way the deputy taking the report wrote  
3 it. And then once that report was completed, I was assigned  
4 to conduct the follow-up investigation.

5 Q. When did you begin your investigation?

6 A. I met with -- well, the -- about the 11th of January of  
7 2008.

8 Q. What specifically were you asked to investigate?

9 A. The original conversation that I had with Mr. Parker was  
10 that the, uh, spill was the result of vandalism or, well,  
11 vandalism would be the legal term we use, uh, in the California  
12 Penal Code. He categorized it as a possible saboteur. So  
13 essentially, my investigation was to determine whether this  
14 was an act of vandalism or sabotage or essentially an  
15 intentional act by somebody.

16 Q. Did you interview anyone as part of your investigation  
17 of the, uh, vandalism at the Los Olivos facility?

18 A. I did.

19 Q. Who did you interview?

20 A. I interviewed quite a few people. Um, I interviewed  
21 Mr. Proskow, an employee of Greka. I interviewed county  
22 inspectors that work for, um, petroleum chemical inspections,  
23 uh, fish and game wardens, quite a few people.

24 Q. Detective Reichick, did you prepare a report of your  
25 investigation?

1 A. I did.

2 Q. Would it help to have your report before you as we go  
3 through this examination?

4 A. Yes, it would.

5 MR. ZARRO: Your Honor, I have what has been  
6 identified as CA 5016. It's a report of the sheriff's  
7 department dated February 19, 2008.

8 May I approach the witness?

9 THE COURT: Yes.

10 BY MR. ZARRO:

11 Q. Detective Reichick, what we have placed before you is a  
12 document that counsel has agreed may be admitted into  
13 evidence as CA 5016.

14 MR. ZARRO: Do I have that right, Counsel?

15 MR. DIAMOND: No objection, Your Honor.

16 THE COURT: Okay. Admitted.

17 BY MR. ZARRO:

18 Q. Well, maybe it'd be best if you told the Court what it  
19 contains. Would you let us know what that is?

20 A. I actually authored several follow-up reports to that  
21 original incident report written by Deputy Rasini so this is  
22 actually essentially a summary of the full investigation.

23 Q. And also, does it include a document you received from  
24 Mr. Parker?

25 A. Yes, it does.

1 Q. Do you remember when you received that document from  
2 Mr. Parker?

3 A. Not specifically. No.

4 Q. Well, let me then renew my earlier question. And it was  
5 did you interview anyone -- and I believe you mentioned a  
6 field personnel, Scott Proskow. Can you remember any other  
7 folks that you might have interviewed as part of your  
8 investigation?

9 A. Well, I definitely interviewed Mr. Parker himself.

10 Q. Did you interview anyone from the California Department  
11 of Fish and Game at the time?

12 A. Yes, I did. Both, uh, Lieutenant, I believe he  
13 pronounces it George Gross, but it's spelled like Jorge and a  
14 ward by the name of Jamie I believe it's Dostal, D-o-s-t-a-l.

15 Q. Did you have any testing done as part of your  
16 investigation?

17 A. I did.

18 Q. Can you describe it?

19 A. Sure. There were two pieces of -- or two evidence  
20 collections in particular. One was swabs of the injection  
21 motor that failed, and the other was a drain cap that was  
22 submitted to the California Department of Justice for lab  
23 testing.

24 Q. Did you do any surveillance as part of your  
25 investigation?

1 A. I did.

2 Q. Can you describe what surveillance you did?

3 A. With my initial discussion with Mr. Parker, he  
4 identified someone, a person of interest, and in accordance  
5 with that, I placed a battery powered GPS tracker on his  
6 vehicle, that being the person of interest.

7 Q. Based upon your interviews, your testing and the  
8 surveillance that you did, what did you learn about the  
9 allegations of vandalism at Greka Los Olivos facility?

10 A. I found insufficient evidence to believe that this was  
11 an intentional act conducted by anybody.

12 Q. What was that based on?

13 A. Primarily based upon the interview with Inspector Barns,  
14 the county inspector, that talked to me about the motor  
15 itself and my -- when the forensic technician was conducting  
16 the swabs from the motor, what I observed at the time. So  
17 observing that evidence collection, what the motor looked  
18 like and being coupling with the interview with Inspector  
19 Barns.

20 Q. Did you learn anything about surveillance that helped  
21 with your . . .

22 A. There was another incident at a different location that  
23 initially Mr. Parker was, you know, concerned that he may  
24 have been responsible for. It turned out that Mr. Parker was  
25 doing physical surveillance of that person of interest, and

1 that caused him to discount his involvement. At the same  
2 time, my GPS on that vehicle showed the same thing.

3 Q. With regard to the drain cap, did you observe any  
4 activity at the Los Olivos facility?

5 A. I did.

6 Q. Can you describe what you observed?

7 A. On the day that we were present for the inspection of  
8 the failed motor, um, I observed several Greka employees  
9 attempting to lift an eight by 20-foot plate of steel up off  
10 of the area where the was drain cap was located. They were  
11 trying to do it with shovels, and it was so heavy that they  
12 actually had to use a tracker or back hoe to lift it off of  
13 there. Essentially, the drain cap itself was covered by very  
14 large and heavy steel plates.

15 Q. Did you ask any Greka personnel how long those plates  
16 had been there?

17 A. I did. During my interview with Mr. Proskow, he  
18 estimated that at least six months that the plates had been  
19 in that location.

20 MR. ZARRO: Detective Reichick, I really appreciate  
21 your time this afternoon and for coming here, and now, I'll  
22 pass the witness.

23 CROSS-EXAMINATION

24 BY MR. DIAMOND:

25 Q. Good afternoon, Detective.

1 A. Good afternoon.

2 Q. I understand you've got some important business to take  
3 care of tomorrow so I'm glad we were able to accommodate, uh,  
4 you getting --

5 A. I am, too.

6 Q. -- you in and out today.

7 A. I appreciate it.

8 Q. Um, let me if I may go over some of the testimony that  
9 you just gave, and maybe we can flesh out a few additional  
10 things.

11 A. Sure.

12 Q. You stated that you started your investigation by  
13 meeting with Mr. Tom Parker; correct?

14 A. Correct. It was -- that was when I became initially  
15 aware of his investigation.

16 Q. And did you understand Mr. Parker to be a private  
17 investigator that was hired by Greka to investigate his  
18 suspicions that certain events and equipment at Greka  
19 facilities might have been the result of vandalism or  
20 sabotage?

21 A. Yes, that is correct.

22 Q. By the way, I'm gonna try to use Greka cause I know  
23 that's the name of the company back in 2008, but if I slip  
24 and talk about HVI which is the current name of the company,  
25 is that okay? You'll understand what I'm asking you; right?



1 A. Yes.

2 Q. And Mr. Parker was also -- uh, advised you that he had  
3 the suspicion that perhaps the, uh -- the vandalism or the  
4 sabotage might have caused and been related to certain of the  
5 oil spills that occurred at the Greka facilities in  
6 December 2007 and January 2008; is that right?

7 A. Correct.

8 Q. Did you come to understand that Mr. Parker was a retired  
9 FBI agent who was formerly the Deputy Chief in charge of the  
10 Los Angeles regional office of the FBI?

11 A. Yes. That was immediately clear upon meeting him.

12 Q. I -- I gather that he told you that.

13 A. Yes, he did.

14 Q. And then Mr. Parker in that first meeting provided you  
15 with various facts and information related to his suspicions?

16 A. Correct.

17 Q. And the -- well, let me get to that. Specifically,  
18 based on Mr. Parker's reporting of the facts to you that he  
19 had initially raised with respect to these suspicions, did  
20 those relate to the spill at the Zaca Davis facility between  
21 the evening of January 4th and the morning of January 5th?

22 A. Yes.

23 Q. 2008.

24 A. Correct.

25 Q. If we can turn --

1 MR. DIAMOND: And I apologize, Your Honor, that the  
2 exhibit that is now CA 5016 doesn't have page numbers so I'm  
3 gonna try my best to figure out which pages to turn to, okay?

4 Let's go to the first page, please.

5 THE COURT: It does. If you look in the left-hand  
6 corner, up in the left hand corner, at least mine does, it  
7 says two of 23. It doesn't on the first page.

8 MR. DIAMOND: I see.

9 THE COURT: Two of 23, three of 23?

10 MR. DIAMOND: Okay. We can do it that way. That's  
11 great. Thank you, Your Honor. Thank you for pointing that  
12 out. I didn't see the number on the first page.

13 Let's turn to the first page.

14 Q. Detective, this is first page of Exhibit CA 5016. Is  
15 this your report?

16 A. Yes, it is.

17 Q. And on that first page where it has the names Tom  
18 Parker, Susan Whalen and Scott Proskow and Eric Schramm, were  
19 those the four people that you interviewed as part of your  
20 investigation?

21 A. Two of them I did not interview, but they were  
22 referenced in the report.

23 Q. Which two did you interview?

24 A. I interviewed Tom Parker and Scott Proskow.

25 Q. If you -- let's turn if we can, please, to page . . .

1 MR. DIAMOND: Your Honor, there's a lot more pages  
2 that are not numbered.

3 THE COURT: Okay.

4 MR. DIAMOND: Well, let's do this. Turn to Bates  
5 number, please, if you can still find it DFG 040613. Yes.  
6 Perfect.

7 Q. Uh, detective, I'm showing you now it's the first page  
8 that is a -- looks to -- appears to be a nine-page document  
9 that's entitled Investigative Summary Report, Greka energy  
10 incidents dated January 9, 2008. Is this the report that was  
11 provided to you by Private Investigator Parker?

12 A. I believe so. It -- I don't recall exactly when he  
13 provided it to me, but it does certainly ring a bell, and  
14 yes, it is indicative of what he provided me.

15 Q. And it says in handwritten notes at the top draft only,  
16 confidential. Do you recognize that handwriting?

17 A. I believe that was on there when I received them.

18 Q. And the report -- I'm gonna call it the draft report.

19 A. Okay.

20 Q. This draft report has several photographs attached to  
21 it. And those photographs came with the report?

22 A. I believe so. When I initially met with Mr. Parker, he  
23 had color photographs, digital photographs on his camera. So  
24 I can't attest that they are one in the same, but they seem  
25 to be similar.

1 Q. Okay. In connection with your investigation, you took  
2 into physical evidence what I believe is described as a quote  
3 rusty metal drain cap with a hole cut in the center close  
4 quotes. Do you recall that?

5 A. I do. I actually was not the one who collected that  
6 evidence, but I was the person who transported it to the  
7 Department of Justice crime lab.

8 Q. And that drain cap, was that the same one that you  
9 testified to in response to opposing counsel's questions that  
10 was at the end of the pipe that was located at the facility  
11 inside the containment area?

12 A. Based upon the chain of custody on that evidence, yes.

13 Q. And that's the same pipe, again, just so we all know  
14 what we're talking about, that had the metal plate that you  
15 just described that was on top that you observed appropriate  
16 people with a crane of some kind lifting it off?

17 A. Correct.

18 Q. And was the rusty metal drain cap with the hole cut in  
19 the center the subject of Mr. Parker's suspicions about  
20 vandalism at least in part?

21 A. Yes.

22 MR. DIAMOND: If we can turn, please, to the best  
23 way to do this is by Bates number DFG 040685.

24 Q. This is a page from your report, Detective Reichick?

25 A. Yes.

1 Q. You recognize it?

2 A. I do.

3 Q. Okay. And there's also -- well, halfway down under  
4 description of evidence, it says one rusty metal drain cap  
5 with hole cut in center. Do you see that?

6 A. I do.

7 Q. And then next to it in handwritten notes, I believe it  
8 says determine type of tool used to make cuts. Do you see  
9 that?

10 A. I do.

11 Q. Whose handwriting is that?

12 A. I do not know. The first line, the one rusty metal  
13 drain cap with hole cut in center is my handwriting. I don't  
14 recall where that notation came from. I think it may have  
15 been a post-it note stuck onto the form, but I -- I cannot  
16 say for certain.

17 Q. Okay. It's clearly not your handwriting; right?

18 A. Correct.

19 Q. Uh, but you're not sure whose handwriting it is.

20 A. Correct.

21 Q. Would it be another law enforcement person's  
22 handwriting?

23 A. Very -- very likely, yes.

24 Q. Uh, and did you, uh, then, um, make the determination of  
25 the -- or send the -- the rusty metal cap off I believe you

1 referenced to the crime lab?

2 A. I did.

3 Q. To make the determination of the type of tool used to  
4 make those cuts?

5 A. Yes.

6 MR. DIAMOND: And let's turn, please, to DFG  
7 040686.

8 Q. I now ask you, Detective Reichick, to take a look at  
9 this page from your report. Do you recognize it?

10 A. I do.

11 Q. And on this page, it has under -- where it says summary  
12 slash results do you see that?

13 A. I do.

14 Q. It says the hole in the piece of metal, Item Number 1,  
15 appears to have been at least partially made with metal  
16 sheers of some type. Do you see that?

17 A. I do.

18 Q. And was that the summary determination that was made as  
19 to the type of tool that was used or likely used to make the  
20 cuts in the pipe?

21 A. To my awareness, yes.

22 Q. And the persons making this determination, was that the  
23 California Department of Justice, Bureau of Forensic Services  
24 Santa Barbara Criminalistics laboratory?

25 A. Yes.

1 Q. And I assume that that's part of their normal and  
2 regular job, to uh -- to take in certain types of forensic  
3 evidence and make these kinds of determinations. Would I be  
4 correct in that?

5 A. Yes.

6 Q. As part of your investigation, Detective, were you ever  
7 able to identify or recover the tool that was likely used as  
8 concluded by the forensic lab to make the cuts in that metal  
9 pipe?

10 A. No.

11 Q. That wasn't something that, for example, might have been  
12 on the facilities of the property somewhere that you were  
13 able to locate?

14 A. No. And I should point out that the actual result of  
15 the laboratory occurred approximately two years after my  
16 taking it to the crime lab. So I brought the evidence to the  
17 crime lab in January of 2008, and the report was written at  
18 the end of 2009.

19 Q. Okay. And is there some reason that it took so long for  
20 the crime lab to make the identification to your knowledge?

21 A. I have no idea.

22 Q. Nevertheless, whatever tool was used to make this  
23 particular cut in solid metal was -- has never been recovered  
24 to your knowledge.

25 A. Correct.



1 Q. And you were never able to identify who may have made  
2 the cut in the metal pipe; correct?

3 A. Correct.

4 Q. You investigated as possible suspects suggested by  
5 former Agent Parker three former Greka HVI employees;  
6 correct?

7 A. I investigated one.

8 Q. One, okay. But there were two others, were there not,  
9 that Mr. Parker suggested might be, I guess, potential  
10 persons of interest?

11 A. There were two other persons that he mentioned. By the  
12 time he mentioned them, I had very shortly thereafter after  
13 that conversation came to the conclusion based upon my --  
14 according to my previous testimony about my interview with  
15 Inspector Barns and my observations of the motor that they  
16 would not have been suspects based on the determination by me  
17 that it did not appear to be an intentional act.

18 Q. Okay. And then you concluded that these particular  
19 persons were not involved in any acts of vandalism or  
20 sabotage at the HVI facilities; correct?

21 A. I didn't look into it to come to that determination.

22 Q. Okay.

23 A. So I -- essentially, my determination for the lack of  
24 intentional act precluded anybody else.

25 Q. Did you ever interview any of those three persons of

1 interest?

2 A. No, I did not.

3 Q. Uh, any particular reason why you didn't?

4 A. Prior to getting to the who, I was attempting to  
5 determine the how or the why.

6 Q. Did you conduct any interviews of any of the Greka HVI  
7 employees?

8 A. Mr. Proskow.

9 Q. Other than Mr. Proskow?

10 A. It's possible. I have a vague recollection of speaking  
11 to an electrician. I don't know who he was employed by.  
12 It's been quite some time.

13 Q. I understand.

14 A. I apologize.

15 Q. Understandable. Any former employees, were they  
16 interviewed?

17 A. No.

18 Q. And so -- again, so I understand because you were trying  
19 to figure out the what, you never advanced to the stage of  
20 trying to figure out the who which theoretically would  
21 include, I guess, uh, HVI employees or former employees or  
22 other third parties; correct?

23 A. Correct.

24 Q. I just have a couple more questions, Detective. Did you  
25 ever interview anyone at HVI or otherwise to find out -- well

1 strike that. Were you ever interested in trying to determine  
2 whether any HVI employees or former employees knew of the  
3 existence of the 12-inch corrugated pipe that has the metal  
4 cap at the end of it, um, to determine, you know, what they  
5 may have known about it?

6 A. I was aware of Mr. Parker's account of that with  
7 relation to Mr. Dean. Um, similarly, in an interview I had  
8 with a game warden, he was also aware of that. From several  
9 years prior.

10 Q. Do you recall the game warden?

11 A. I believe it may have -- either Lieutenant Jorge Gross  
12 or Jamie Dostal. One of the two had been present at another  
13 incident at the Zaca Davis release.

14 Q. Did you ever find out as part of your investigation  
15 whether anyone knew of the hole in the metal cap of the pipe  
16 prior to the January 5th, 2008 spill?

17 A. Not specifically the hole; however, between the game  
18 warden and -- just as I testified, between the game warden  
19 and Mr. Dean being aware that the liquid could come out the  
20 drainage pipe, those were the two that to my knowledge were  
21 aware of it. Um, but no, not specifically. With my  
22 interview of Mr. Proskow, it was clear that that large metal  
23 plate was over the top of that end cap for the last six  
24 months.

25 Q. Did you ever ask Mr. Proskow whether he knew that there

1 was a hole of any kind in the -- in the metal cap or along  
2 the pipe?

3 A. I would have to refer to my report covering the  
4 interview. I -- I don't know if -- I don't know if I did,  
5 and I don't know if he knew.

6 Q. If it's not in your interview notes, um, would it be --

7 A. Not to my recollection. So my recollection is that  
8 Mr. Proskow was not aware.

9 MR. DIAMOND: Thank you, sir.

10 I have no further questions.

11 MR. ZARRO: Brief follow-up, Your Honor?

12 THE COURT: Go ahead.

13 REDIRECT EXAMINATION

14 BY MR. ZARRO:

15 Q. Detective Reichick, thanks for your patience.

16 A. No problem.

17 Q. Can you please grab the physical evidence examination  
18 report that you were going over with Mr. Diamond?

19 A. Yes.

20 Q. The examination section of the report, would you refer  
21 to that for me, please, and take a quick read of it?

22 A. Yes.

23 Q. Is there anything in the examination report -- well, let  
24 me ask you this first. Did you review the examination -- did  
25 you review this report when it came to you?

1 A. Yes, I did.

2 Q. And did you review the examination section of the  
3 report?

4 A. Yes.

5 Q. And the examination report, would you mind reading for  
6 it?

7 A. The examination section reads: The majority of the hole  
8 has a very rounded edge which could have come from weathering  
9 or being cut with a different type of tool than sheers.  
10 Where cut, the outer edge of the item appears to have been  
11 cut with an abrasive cutoff wheel type tool. Item 01 has a  
12 Department of Fish and Game evidence tag attached.

13 Q. Did this examination report inform your conclusions  
14 about the "what" that occurred at the facility?

15 A. It did not.

16 Q. Okay. Let me ask you this, however. It does indicate  
17 that there was weathering on the cap?

18 A. It does.

19 Q. Also, if you'll go up the summary of results, the second  
20 line above that was not read. It says the item is very  
21 rusted. It has no tool marks suitable for comparison. The  
22 very rusted part of that, did that inform you about the  
23 nature of the drain cap?

24 A. It did.

25 Q. And what did it tell you?

1 A. That it had been exposed to the elements.

2 Q. Okay. And what did you understand that drain was used  
3 for?

4 A. The existence of the pipe itself through the berm or  
5 that drain is to allow collected rain water inside that  
6 collection berm to flow out.

7 MR. ZARRO: Thank you, Detective Reichick.

8 At this time, I neglected to move CA 5016 into  
9 evidence and ask that it be moved in at this time, Your  
10 Honor.

11 THE COURT: Um, I think it was moved in earlier.

12 I do want to note that my copy of the exhibit is  
13 Bates No. DFG 040613, and I think defense counsel was asking  
14 questions for pages that were it looks like it was longer,  
15 the exhibit.

16 MR. ZARRO: Actually, I believe what happened, Your  
17 Honor, is that part of it was flip flopped, and so some of  
18 the Bates labeling was put up front.

19 THE COURT: 40628 was my last page number.

20 THE WITNESS: I encountered the same thing with the  
21 exhibit just now. The pages that they showed are in this  
22 packet is not at the end where --

23 THE COURT: They're not at the end?

24 THE WITNESS: They're referenced somewhere in the  
25 report.

1 THE COURT: Okay.

2 MR. DIAMOND: I'm not gonna take responsibility for  
3 it, Your Honor, but I will say I think everyone was trying in  
4 some haste to put it together and to make sure that  
5 confidential information that was in the full report was not  
6 of record.

7 THE COURT: Okay.

8 MR. DIAMOND: There are pages that may have gotten  
9 a little bit out of order.

10 MR. ZARRO: I'm trying to get driver's license  
11 numbers and social security numbers out of there.

12 THE COURT: Okay.

13 MR. ZARRO: Thank you.

14 THE COURT: Very well.

15 MR. DIAMOND: Couple more questions, Your Honor.

16 THE COURT: Go ahead.

17 RECROSS-EXAMINATION

18 BY MR. DIAMOND:

19 Q. Detective, in response to the last couple of  
20 questions --

21 A. Yes.

22 Q. -- you testified that because there was some obvious  
23 rust and -- and weathering, uh, on the drain cap, uh, that it  
24 was exposed to the elements. Do you recall that?

25 A. Yes.

1 Q. And based on your years of experience with a metal pipe  
2 that's buried in the ground, it would be easily weathered and  
3 rusted if it was subject to moisture, air or anything else  
4 that, uh, would get through it through natural occurrence in  
5 the ground over the years, would it not?

6 A. Correct.

7 Q. Um, last question. Counsel was asking you about the  
8 examination section of the physical evidence report.

9 Pull that back up, please.

10 And he was asking you to read it, and I'm not gonna  
11 make you do that again, but do you agree, Detective, that,  
12 um, the majority of the hole could come from either  
13 weathering or being cut from a different type of tool than  
14 sheers; correct?

15 A. That's what it states. I did not actually examine the  
16 evidence, and this was authored by a California Department of  
17 Justice employee so --

18 Q. I understand. By the way, and I don't know the answer  
19 to this question, maybe you do, but what it says, that it  
20 also could have been cut with an abrasive cutoff wheel type  
21 tool. Do you have any idea what that is?

22 A. Essentially a -- a spinning disk on a drill that -- a  
23 typical metal cutting device.

24 MR. DIAMOND: Thank you very much, Detective.

25 MR. ZARRO: No further questions, Your Honor.



1 THE COURT: Okay.

2 The witness is excused.

3 So since it's almost 4:00 o'clock, I guess we'll  
4 end for today, and we'll start tomorrow at 9:00 o'clock.

5 And which witness are we starting with tomorrow?

6 MR. GLADSTEIN: Your Honor, we'll start with  
7 Dr. Lyndon Lee.

8 THE COURT: Okay.

9 MR. GLADSTEIN: And he will be the United States' last  
10 witness in our case-in-chief.

11 THE COURT: Okay. And then we'll move on to  
12 defendant's case. So we'll see you all tomorrow morning.  
13 Have a good evening. Hope you get a chance to watch the  
14 game.

15 THE CLERK: This court is in recess.

16 (Proceedings were concluded at 3:53 p.m.)  
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CERTIFICATE OF REPORTER

[illegible]

DATE: OCTOBER 24, 2018

LAURA MILLER ELIAS, CSR 10019  
FEDERAL OFFICIAL COURT REPORTER

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# Attachment B

1 UNITED STATES OF AMERICA  
2 UNITED STATES DISTRICT COURT  
3 CENTRAL DISTRICT OF CALIFORNIA  
4 WESTERN DIVISION

5 - - -  
6 HONORABLE FERNANDO M. OLGUIN  
7 UNITED STATES DISTRICT JUDGE PRESIDING  
8 - - -

9 UNITED STATES OF AMERICA, )  
10 ET AL., )  
11 )  
12 PLAINTIFF, )  
13 )  
14 VS. ) CASE NO.: CV  
15 ) 11-5097-FMO  
16 )  
17 HVI CAT CANYON, INC., )  
18 )  
19 )  
20 DEFENDANT. )  
21 )  
22 )  
23 )  
24 )  
25 )

REPORTER'S TRANSCRIPT OF PROCEEDINGS  
(P.M. SESSION)

MONDAY, OCTOBER 22, 2018

LOS ANGELES, CALIFORNIA

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THE PLAINTIFF:

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1 LOS ANGELES, CALIFORNIA; MONDAY, OCTOBER 22, 2018; 1:07 P.M.

2 - - -

3 THE COURT: We are back on the record in 11-5097.

4 Why don't we get started.

5 Plaintiffs, please call your next witness.

6 MS. MO: The plaintiffs jointly call our next  
7 witness, Melissa Boggs, a senior environmental scientist at  
8 the Office of Spill Prevention and Response.

9 THE COURT: Okay.

10 THE CLERK: Please raise your right hand.

11 (Witness sworn.)

12 THE CLERK: Thank you.

13 Please have a seat.

14 MS. MO: I have here Document No. 345-14.

15 THE COURT: Can you hold on a second?

16 MS. MO: Oh.

17 THE CLERK: Please state your name for the record  
18 and spell your last name.

19 THE WITNESS: Melissa Boggs, B-o-g-g-s.

20 MS. MO: I have here Document 345-14.

21 Your Honor, may I approach the witness?

22 THE COURT: Yes.

23 DIRECT EXAMINATION

24 BY MS. MO:

25 Q. Ms. Boggs, do you recognize the document I just handed

1     you?

2     A.    I do.

3     Q.    Is it your trial declaration in this case?

4     A.    It is.

5     Q.    Do you adopt your trial declaration as your sworn  
6     testimony under oath in this case?

7     A.    I do.

8                 MS. MO:  At this time, Your Honor, we'd like to  
9     move in Ms. Boggs' declaration, Docket No. 345-14 into  
10    evidence, and we'd also like to move into evidence each of  
11    the exhibits referenced on pages 14 and 15 of her declaration  
12    which are also listed in Docket No. 437 in the notice of  
13    intended exhibits for today.  Admissibility of each of these  
14    exhibits has been stipulated to by the parties as shown in  
15    the third joint exhibit stipulation as Docket 430-1.

16                THE COURT:  Okay.  It's accepted, the  
17    stipulation -- the declaration is accepted and all the  
18    exhibits are admitted.

19                MS. MO:  Thank you.  We tender the witness.

20                                 CROSS-EXAMINATION

21    BY MR. DIAMOND:

22    Q.    Good afternoon, Ms. Boggs.  I'm Mr. Diamond.  I have  
23    just some questions for you, not a lot today.  I understand  
24    you're an environmental scientist working with the California  
25    Department of Fish and Wildlife since 1991; is that correct?

1 A. Correct.

2 Q. And your responsibilities include assisting with the  
3 deputy of IAPs, monitoring compliance and clean-up operations  
4 amongst other things. True?

5 A. True.

6 Q. Can you explain for the Court what an IAP is?

7 A. IAP stands for Incident Action Plan, and as part of the  
8 Incident Command System, we prepare, um, these plans that  
9 detail the clean-up operations for a specific what we call  
10 operational period.

11 Q. And in connection with the IAPs, you don't personally  
12 investigate the causes of oil spills; correct?

13 A. That is correct.

14 Q. And to your understanding, is that the warden's  
15 responsibility or law enforcement?

16 A. Correct.

17 Q. Uh, you gave a fair amount of direct testimony, uh,  
18 generally on the subject of produced water and its chemical  
19 compositions amongst other things. Do you recall that in  
20 your testimony?

21 A. Yes, I do.

22 Q. Uh, but you've not been designated by either the State  
23 of California or the United States government as an expert in  
24 this case; correct?

25 A. That is correct.



1 Q. Let me turn your attention, Ms. Boggs, please to the  
2 July 13, 2005 spill at HVI Bell facility which I believe you  
3 started testifying about on page 4 of your declaration. Uh,  
4 in connection with your work on that spill site, you  
5 previously testified that in order to try and assess the  
6 amount of subsurface layer of oil, you and others dug pits in  
7 the creek bed to look for subsurface oil. Do you recall  
8 that?

9 A. Uh, I don't think that's completely accurate. Um, I  
10 believe the reference to digging pits was in regards to me  
11 doing an inspection to determine if it was cleaned up  
12 sufficiently.

13 Q. Okay. When you did that, some of the pits contained a  
14 subsurface layer of hardened oil; is that right?

15 A. Correct.

16 Q. Also known as asphalt pavement?

17 A. Correct.

18 Q. Ultimately, you concluded that the subsurface layer of  
19 oil contaminated sediment was from previous releases and not  
20 the July 13, 2005 spill; correct?

21 A. That's correct, along with the assistance from the  
22 regional water quality control board.

23 Q. And in your work over the years in Santa Barbara county,  
24 um, had you encountered that situation before where you  
25 determined that oil contamination was from a previous release

1       than the one you were currently investigating?

2       A.     Could you repeat that question, please?

3       Q.     Sure. In connection with your work over the years, had  
4       you encountered a similar situation where in connection with  
5       a clean up of a spill, the subsurface oil sediment  
6       contamination that you found was not related to the spill  
7       that you were then currently, uh, working on?

8       A.     To my memory, uh, I don't think I have run across that  
9       before, but I certainly have run across just, you know, areas  
10      where there's been a spill where there's background  
11      contamination because there's background contamination all  
12      over the place.

13      Q.     And -- and what do you mean by background contamination?

14      A.     Background contamination is common just from generally  
15      society's use of chemicals. Um, people put fertilizers on  
16      their lawn, and it rains, and it enters storm drains, and it  
17      migrates so it's general background contamination from  
18      society's use of chemicals.

19      Q.     And what about specifically, uh oil? Contamination from  
20      oil?

21      A.     And what's the question then?

22      Q.     Have you found circumstances where this part of what you  
23      call background contamination, that it also involved oil in  
24      the sediment that was there from however many years ago?

25      A.     I don't completely understand your question, I'm sorry.

1 Q. Okay, let's get at it this way. How long have you been  
2 doing work in Santa Barbara county?

3 A. Since 1991.

4 Q. And in connection with all that work, have you come to  
5 learn that there were oil operators in Santa Barbara county  
6 that go back perhaps even as far as 100 years ago?

7 A. Yes, I'm aware of that.

8 Q. And, uh, in connection with those various oil operators  
9 through the last century, uh, did you come to learn that some  
10 of the oil was even literally transported through creek beds  
11 years ago?

12 A. Yes, I've heard that.

13 Q. Okay. Have you heard that one or more creeks, uh, have  
14 become known as the quote asphalt creeks close quotes because  
15 the hardened oil became hard -- so hard, it became like  
16 asphalt pavement?

17 A. I don't recall being informed of that term, no.

18 Q. Do you know whether the -- specifically the Palmer Road  
19 Creek is one of those creeks that people in Santa Barbara  
20 county have historically referred to, uh, as an asphalt  
21 creek?

22 A. I do not know that.

23 Q. In connection with the hardened subsurface crude oil  
24 that came from the releases, prior to the July 13, 2005 Bell  
25 spill and having no connection whatsoever with Greka or HVI,

1 it took, uh, more than a month, correct, to remove that  
2 subsurface crude by your teams, did it not?

3 A. Actually, I'm -- it's not clear the source of the  
4 hardened asphalt so we -- we don't know the source of that.  
5 All -- all I know is that it was present, um, in some of the  
6 pits that we dug when we were overseeing the clean-up of this  
7 particular spill.

8 Q. Okay, but let's look at your previous testimony, your  
9 declaration, paragraph 15. All right? You say it took until  
10 July 20, 2005 for the majority of the pooled oil in the  
11 upstream portion of Palmer Road Creek to be removed; correct?

12 A. Correct.

13 Q. And then the next sentence says removal of subsurface  
14 crude oil believed to have come from previous releases  
15 continued through August 17, 2005; right?

16 A. Correct.

17 Q. And when you say come from previous releases in your  
18 statement, you're talking about releases prior to July, uh,  
19 of 2005 in connection with the spill you were working on;  
20 correct?

21 A. Correct.

22 Q. Five weeks sounds like a lot of time to remove  
23 subsurface crude oil, uh, that you found from previous  
24 releases. In your experience, is it? Is five weeks a  
25 considerable amount of time?

1 A. No, it's not, especially at a habitat like this. Um,  
2 there's a lot of sensitive, um . . . uh, sensitive habitat  
3 actually, and so we, uh, prefer to be careful in how we do --  
4 when we bring in heavy equipment, uh, to clean up an oil  
5 spill, uh, we try to do it in a way that causes the least  
6 amount of damage to the habitat as possible so it is typical  
7 that a clean-up could take quite a bit of time.

8 Q. Okay, but -- okay, so the -- the oil that we're talking  
9 about here in your paragraph 15 relating to previous releases  
10 to the July 2005 spill, can you give me an estimate either in  
11 number of bins or approximate gross weight? How -- how much  
12 oil are we talking about?

13 A. I cannot give you an -- a quantity estimate.

14 Q. Let me direct your attention to the December 7, 2005,  
15 uh, Davis tank battery spill which you discuss in your  
16 declaration starting at page 8. Uh, you understood  
17 generally, tell me if I have this right, that crude oil had  
18 flowed from a tank down an access road, uh, to approximately  
19 one half mile of a waterway. Do you recall that?

20 A. Yes, I do.

21 Q. And that creek, uh, was dry at the time of the spill,  
22 was it not?

23 A. Correct.

24 Q. And you also understood that the creek was generally dry  
25 throughout the year except during periods of rain; correct?

1 A. Correct.

2 MR. DIAMOND: Let me pull up, uh, please, Exhibit  
3 U.S. 0777.

4 Q. Now, Ms. Boggs, I want to show you what has been  
5 admitted into evidence as U.S. 0777 which is entitled Ecology  
6 and Environment Inc. It's a letter, uh, to the United States  
7 EPA, Emergency Response Section, and it's signed by someone  
8 named Michael, um, Schwennesen who's a project manager. Do  
9 you know who that is?

10 A. No. I'm only seeing the front page so I don't know who  
11 signed it.

12 Q. Okay. So you've seen this document before but only the  
13 front page? I'm sorry, is that what you said?

14 A. No. I -- I can -- there's -- I cannot -- I can only see  
15 the front page --

16 Q. Oh.

17 A. -- on the screen --

18 Q. I'm sorry.

19 A. -- so I don't know who signed it.

20 Q. Okay. Uh, have you seen -- do you recognize this  
21 document?

22 A. Could you go back to the first, please?

23 Q. Sure.

24 A. Thank you. It does not look familiar, no.

25 Q. Okay. You also worked on the July 16, 2007 Bell

1 pipeline spill known as the Palmer Road Family Line spill;  
2 correct?

3 A. Correct.

4 Q. I just have a few more questions for you. You -- uh, in  
5 connection with that spill, you did not participate in the  
6 state's official effort -- efforts to quantify the amount of  
7 any of the -- of the spills, did you?

8 A. That is correct.

9 Q. And would that also be true, that you didn't participate  
10 in the quantification of the other spills that you referenced  
11 in 2005 in your direct testimony?

12 A. Correct.

13 Q. And, in fact, you don't quantify spills as part of your  
14 job, and you weren't assigned that role in connection with  
15 any of the work you did with these spills; correct?

16 A. If it's a small spill and we don't have a full unified  
17 command, uh, there are times when I would be the only  
18 responder for our department, and then in those situations, I  
19 do tend to estimate as best as I can spill, uh, volume, but  
20 typically, that is not my duty at a spill response.

21 Q. Right. And you didn't have any such role in connection  
22 with what I'll call the Greka or the HVI spills; correct?

23 A. Correct.

24 Q. In all of the spills that you, uh, have testified about,  
25 um, to your knowledge, did HVI, uh, voluntarily and promptly

1     notify the government authorities of the spills?

2     A.     I would have to go back and look at the spill reporting  
3     information. I don't recall exactly the expediency or lack  
4     thereof of their notifications.

5     Q.     So you can't think of any instance sitting here today  
6     where you're personally aware of any spill or release where  
7     HVI failed to notify the regulatory authorities, can you?

8     A.     Not without looking at records, I cannot answer that.

9     Q.     And if there's -- if there's no evidence of that in any  
10    records, you can't think of anything independent of the  
11    records, correct, that you can tell me about today where HVI  
12    failed to notify the authorities; right?

13    A.     Could you repeat that question?

14    Q.     Yeah. Independent of the records -- let's assume the  
15    records don't have anything about what you're wanting to look  
16    at.

17    A.     Mm-hmm.

18    Q.     So independent of the records, you can't think of  
19    anything today that you can recall specifically where HVI  
20    failed to notify the authorities of a spill; correct?

21    A.     I believe that's correct.

22                 MR. DIAMOND: I'll pass the witness.

23                         REDIRECT EXAMINATION

24    BY MS. MO:

25    Q.     Ms. Boggs, you were asked about the asphalt pavement in



1 Palmer Road Creek. Do you remember that?

2 A. Yes.

3 Q. Can you describe for the Court what, in fact, that looks  
4 like?

5 A. It's basically hardened oil that almost looks like a  
6 parking lot, asphalt parking lot, but in this particular  
7 case, it was confined, um, underneath sediment, um, in a  
8 waterway.

9 Q. And despite this asphalt pavement, is there any function  
10 in that area as a habitat?

11 A. Oh, most certainly. Um, the habitat was a decent  
12 quality habitat. It's, uh, a weathering habitat. There are  
13 a number of, um, species that utilize that habitat so, yes,  
14 it's -- it is a functional habitat.

15 Q. Do you remember how much of Palmer Road Creek had this  
16 asphalt pavement?

17 A. We -- to my recollection, we did not delineate the  
18 extent of the asphalt pavement at -- at the time. So, um, we  
19 were primarily focused on the, um -- the spill at hand, and  
20 while we were working on the clean-up, we found this  
21 additional contamination. After consulting with, um, the  
22 Regional Water Quality Control Board we decided to, um, at  
23 that point address that asphaltic pavement. Um, later, uh,  
24 we were considering having the oil company attempt to remove  
25 it when the whole oil field was going to be abandoned.

1 Q. And you were asked about, uh, the quantification in the  
2 July 16, 2007 Bell spill. Um, can you explain what role, if  
3 any, you have in quantification? Or, I'm sorry, your  
4 knowledge about, um, quantification at that spill?

5 A. I was not, uh, involved with the quantification of that  
6 spill.

7 Q. To your knowledge, was HVI involved in the  
8 quantification of that spill?

9 A. I don't know.

10 Q. Were you involved in, um -- in looking at your  
11 declaration, um, where you referred to unified command's  
12 discussion regarding the process for quantification, do you  
13 remember that?

14 A. Yes, I do.

15 Q. So you did have knowledge about the discussions about  
16 quantification --

17 MR. DIAMOND: Objection, Your Honor. She's leading  
18 the witness all over the place.

19 THE COURT: Overruled.

20 You can answer the question.

21 THE WITNESS: Oh. Could you repeat that, please?

22 BY MS. MO:

23 Q. Um, do you have knowledge about the unified command's  
24 discussion regarding the process for quantification in that  
25 spill?

1 A. Yes.

2 MS. MO: Before concluding, Your Honor, may I have  
3 a moment?

4 THE COURT: Yes.

5 MS. MO: I have nothing further.

6 MR. DIAMOND: No further questions.

7 THE COURT: Okay. The witness is excused.

8 Thank you.

9 You want to call your next witness?

10 MR. BACHMAN: Yes, Your Honor. Plaintiffs call  
11 Environmental Protection Agency On-Scene Coordinator Robert  
12 Wise to the stand.

13 THE CLERK: Stop there.

14 Please raise your right hand.

15 (Witness sworn.)

16 THE CLERK: Thank you.

17 Please have a seat.

18 Please state your name for the record and spell  
19 your last name.

20 THE WITNESS: Uh, Robert Wise, uh, W-i-s-e.

21 MR. BACHMAN: Your Honor, may I approach the  
22 witness?

23 THE COURT: Yes.

24 DIRECT EXAMINATION

25 BY MR. BACHMAN:

1 Q. Good afternoon, Mr. Wise.

2 A. Good afternoon.

3 Q. Did you prepare a trial declaration for this matter?

4 A. Yes.

5 Q. And do you recognize the document that I just handed to  
6 you?

7 A. Yes.

8 Q. Is that the trial declaration that you prepared?

9 A. Yes.

10 MR. BACHMAN: And let the record show that  
11 Mr. Wise's declaration was filed with the court as docket  
12 number 345-10. At this time, the plaintiffs ask that the  
13 declaration be admitted into evidence.

14 THE COURT: Okay. It's admitted.

15 MR. BACHMAN: And plaintiffs also ask that the  
16 exhibits referenced on pages 24 to 27 of Mr. Wise's trial  
17 declaration, uh, be admitted into evidence. These exhibits  
18 have been stipulated to by the parties as shown in the third  
19 joint exhibit stipulation at docket number 4300-1.

20 THE COURT: It's admitted.

21 MR. BACHMAN: We tender the witness, Your Honor.

22 THE COURT: Okay.

23 CROSS-EXAMINATION

24 BY MR. SULLIVAN:

25 Q. Good afternoon, Mr. Wise.

1 A. Good afternoon.

2 Q. Have you been an on-screen coordinator with the U.S.  
3 EPA Region 9 for about 15 years?

4 A. Yes.

5 Q. Do you work out of the San Francisco office?

6 A. No, sir.

7 Q. Which office do you work out of?

8 A. I work out of the Signal Hill, California office.

9 Q. Have you worked out of the San Francisco office during  
10 any of those 15 years?

11 A. No.

12 Q. Mr. Wise, is it true that EPA's response actions for oil  
13 spills must be consist with protecting public health, welfare  
14 and the environment?

15 A. Yes.

16 Q. Have you ever taken any courses in college about oil  
17 field production?

18 A. No.

19 Q. You're not an expert in oil field production; right?

20 A. No.

21 Q. Nor are you an expert in oil field or oil spill  
22 clean-up?

23 A. I have a fair amount of experience in oil spill  
24 clean-up.

25 Q. Do you consider yourself to be an expert?

1 A. No.

2 Q. Were you involved -- you were involved in responding to  
3 a number of oil spills at HVI; correct?

4 A. Correct.

5 Q. Is it fair to say that all of the releases at HVI  
6 involved a heavy crude oil as opposed to a light crude oil?

7 A. Uh, yes.

8 Q. In a dry spill, is it easier to clean up heavier crude  
9 oil than the lighter crude oil?

10 A. In a dry spill, I don't understand the question.

11 Q. In a spill onto dry land.

12 A. Uh, it's usually easy to clean up heavy oil, but that  
13 can be dependent on the weather.

14 Q. Is it fair to say that in every clean-up of HVI in oil  
15 releases that you were involved in, there was oil that was  
16 cleaned up with a shovel?

17 A. Yes.

18 Q. Mr. Wise, all the HVI spills that you responded to were  
19 in an inland zone between Highway 101 and further inland.  
20 True?

21 A. Yes.

22 Q. Mr. Wise, let me show you Exhibit No. 37 which has been  
23 admitted into evidence. Mr. Wise, you were asked by Peter  
24 Reich of the EPA Region 9 to go an HVI release and quote "put  
25 a little fire under Greka's ass"; correct?

1 A. Yes, according to this email.

2 Q. Did you think that was appropriate?

3 A. Sure.

4 Q. Why?

5 A. Well, obviously, he felt that I needed to -- sorry, let  
6 me take these off cause you're blurry if I look at you with  
7 them on. Uh, he felt like this --

8 Q. I look better that way.

9 A. -- the release was not going -- uh, the release clean-up  
10 was not going as they wanted it to go.

11 Q. What release clean-up was that?

12 A. Let me look at the date. So this would have been the,  
13 uh . . . so this was before the Zaca spill. I'm not sure  
14 what clean-up this was based on, the date.

15 Q. Did you have any personal involvement as far as you're  
16 aware with the spill prior to June 17th, 2005 that he's  
17 referring to?

18 A. I -- you know, I don't recall.

19 Q. I wanted to ask you about the December 7th, 2005 spill  
20 on HVI's facilities. Um, first, Mr. Wise, is it your  
21 understanding that there is any potential at all, even one  
22 percent or less for a spill to impact the waters of the  
23 United States, then the EPA should exercise jurisdiction over  
24 the oil spill and clean up?

25 MR. BACHMAN: Objection, Your Honor. Relevance.

1 THE COURT: Sustained.

2 BY MR. SULLIVAN:

3 Q. Mr. Wise, I wanted to show you plaintiff's Exhibit  
4 No. 783 which has been admitted into evidence. Is this your  
5 first pollution report dated December 8th, 2005 at a spill at  
6 HVI Zaca facility?

7 A. Yes.

8 Q. Was this reported to be a release of 50 barrels of API  
9 11 crude oil and 50 gallons of produced water?

10 A. Yes.

11 Q. And you reported that this oil flowed down an access  
12 road into an intermittent dry creek; correct?

13 A. Yes.

14 Q. And you later changed that to read an unnamed  
15 intermittent tributary to Zaca Creek as shown on page 4 of  
16 this report; right?

17 A. I guess so.

18 Q. Did the release go down the road into a drainage culvert  
19 and then about -- and then into the unnamed creek for about a  
20 thousand meters before it was stopped?

21 A. Uh, approximately, yes.

22 Q. You made the decision to exercise jurisdiction,  
23 Mr. Wise, based on what you were told by a joint landowner, a  
24 member of the Firestone family; right?

25 A. Yes.



1 MR. BACHMAN: Objection, Your Honor. Relevance.

2 THE COURT: Sustained.

3 MR. SULLIVAN: Your Honor, this goes to his  
4 motivation for involvement in the HVI Greka spills.

5 THE COURT: Sustained.

6 BY MR. SULLIVAN:

7 Q. Mr. Wise, between 2005 and 2009, did you speak with more  
8 than ten different politicians about HVI?

9 A. I don't know the exact number of politicians I spoke to.

10 Q. Did you speak to Supervisors Firestone, Chamberlain,  
11 Santano, Wolfe, Gray, Carbajal, uh, Assemblyman Nava,  
12 Congresswoman Lois Capps and field representatives of U.S.  
13 Senators Barbara Boxer and Diane Feinstein?

14 A. Yes.

15 MR. BACHMAN: Objection, Your Honor. Compound.

16 MR. SULLIVAN: Your Honor, this goes to his  
17 motivations and bias throughout the -- his involvement with  
18 HVI.

19 THE COURT: Sustained.

20 BY MR. SULLIVAN:

21 Q. Mr. Wise, in connection with oil releases you worked  
22 from the Zaca facility, did you ever see oil that made its  
23 way in to the Santa Ynez River?

24 A. No.

25 Q. In connection with the releases you worked on from the

1 Zaca facility, did you ever see any oil that even made its  
2 way into Zaca Creek?

3 A. No.

4 Q. Is it your best estimate that the creek where the  
5 tributary enters runs from about six miles before it even  
6 gets to Zaca Creek?

7 A. I am not sure of the exact distance. I'd have to look  
8 on a map.

9 Q. Any reason to disagree with that?

10 A. No.

11 Q. And then Zaca Creek runs for another seven miles or so  
12 before it reaches the Santa Ynez River. True?

13 A. I believe that's right.

14 Q. Mr. Wise, did you have any personal involvement in  
15 quantifying the amount of any material release from HVI's  
16 facilities?

17 A. No.

18 Q. Mr. Wise, HVI was forced to close the Zaca facility  
19 during the clean-up after the December 7, 2000 (sic)  
20 facility; correct?

21 A. Yes.

22 Q. I'd like to show you Defendant's Exhibit No. 61 which  
23 has been admitted. Are these your notes that you wrote on  
24 January 4, 2006?

25 A. Yes.

1 Q. Even though it says 2005 up there, I believe you  
2 testified that you wrote 'em on January 4th, 2006?

3 A. Yeah, that would be correct.

4 Q. Did you write here that quote "County fire came under  
5 pressure from a member of the Board of Supervisors to allow  
6 Greka to start back up. This is not consistent with what I  
7 was promised by the EPA and by Building and Safety"?

8 A. Uh, yes, that's correct.

9 Q. You were disappointed, right, that HVI was allowed to  
10 start back up its oil and gas production on the Zaca  
11 facility?

12 A. Yes.

13 Q. Mr. Wise, do your notes indicate that Mr. Peter Gourria  
14 said to inform the County that if another spill occurred,  
15 that because of this decision, the county could be found  
16 liable?

17 A. Yes.

18 Q. Mr. Gourria was a section chief of the EPA's Emergency  
19 Response Section. True?

20 A. Yes.

21 Q. Let me show you Defendant's Exhibit Number 62. Are  
22 these also your notes, Mr. Wise?

23 A. Yes.

24 Q. Do these notes reflect a call that you made to Mike  
25 Brown of Santa Barbara county informing him that the County

1 could be liable if another spill occurs before they can fix  
2 the problem with this spill?

3 A. Yes.

4 Q. Mr. Wise, are you aware of any legal reason that  
5 Santa Barbara county could actually have been liable in that  
6 circumstance?

7 A. No.

8 Q. Mr. Wise, let me show you Defendant's Exhibit 45 which  
9 has been admitted. Mr. Wise, did you have a conversation  
10 with employees from the State Department of Fish and Game  
11 where they said they had been snooping at HVI's property, and  
12 they thought they had identified a number of spills?

13 A. Well, this email isn't addressed to me so I don't recall  
14 that conversation.

15 Q. My -- my question was whether you had that conversation  
16 or not.

17 A. Uh, I don't recall.

18 Q. Did you call Mr. Calhoun at this time in the spring of  
19 2006 telling him you wanted to issue orders for clean-up of  
20 HVI spills at that time?

21 A. Yes.

22 Q. Why?

23 A. Because if the spills were not getting cleaned up, then  
24 we may not have any other options.

25 Q. And Mr. Calhoun discouraged you because (a) the

1 connection to the waters is stretched, and (b) it cost a lot  
2 of money, over \$300,000, the last time around.

3 A. Well, in the email from Mark Calhoun to Jim Hanson,  
4 that's what it states, but the email, again, was not  
5 addressed to me.

6 Q. But did Mr. Calhoun discourage you from moving forward  
7 to try to issue clean-up orders over HVI at that time?

8 A. I don't recall if I had an exact email -- excuse me, an  
9 exact conversation with them, with -- excuse me, with  
10 Mr. Calhoun.

11 Q. Do you agree there's a lot of dried creek beds, uh, in  
12 the area of HVI's facility before you get to any actual  
13 waters if it's not raining?

14 A. Yes.

15 Q. Did you understand as of 2006 that there was a serious  
16 question at the EPA concerning whether the EPA had  
17 jurisdiction over releases into dry creek beds?

18 MR. BACHMAN: Objection, Your Honor. Relevance.

19 THE COURT: Sustained.

20 MR. SULLIVAN: Your Honor, I think this goes to  
21 his, uh, truthfulness and basis for exercising jurisdiction  
22 over some of the subsequent spills at HVI.

23 THE COURT: You know, I don't think what -- what  
24 was going on at the policy matter at the EPA is relevant at  
25 that time and so move on.

1 BY MR. SULLIVAN:

2 Q. Mr. Wise, let me show you Defendant's Exhibit No. 42  
3 which has been admitted into evidence. Mr. Wise, did you  
4 respond to a spill at HVI's Bell facility in July of 2007?

5 A. Yes.

6 Q. On the third page of Exhibit No. -- second page, I'm  
7 sorry, of Exhibit No. 42, there's a reference to you writing  
8 two pollution spill reports in connection with that spill.  
9 Do you see that? It's at the bottom, very bottom of the  
10 exhibit.

11 A. Uh, yeah. I see that.

12 Q. Is it correct that you first reported the creek was dry,  
13 and then you changed it, your second report, to indicate that  
14 water wasn't involved, and a sheen was observed?

15 A. Yes.

16 Q. Did you also write, Mr. Wise, that you -- in one of your  
17 reports that you believed there was a report that there was  
18 gonna be rain in July 2007 in Santa Barbara county?

19 A. Uh, yes.

20 Q. Where did you get the information that caused you to  
21 write as key issue rain is expected early next week?

22 A. I would have been responding out of Signal Hill,  
23 California, and I would have checked the weather reports for  
24 Los Angeles.

25 Q. Mr. Wise, let me take a -- ask you to take a look at

1 your first deposition. I'm sorry, um, yeah, pages 285, 19  
2 through 24 and 286, 18 through 20.

3 A. Could you repeat the pages, please?

4 Q. Certainly. Page 285, line 19 through 285, line 24 and  
5 286, line 18 through 286, line 20. I gave you the wrong  
6 volume, I apologize.

7 A. Yeah, my copy doesn't go that high. Could you repeat  
8 the numbers you wanted me to look at again?

9 Q. Certainly. Page 285, lines 19 through 24, page 286,  
10 lines 18 through 20. In particular, were you asked having  
11 reviewed the actual weather reports for Santa Maria from July  
12 2007 and August 2008, what was your basis for writing in your  
13 pollution report which has been marked Exhibit 2801 that rain  
14 was expected next week? I don't recall.

15 Was that truthful testimony?

16 A. Uh, yes.

17 Q. Has there been anything that has made you recall, uh,  
18 now where you believe you got that information?

19 A. Uh, yes.

20 Q. What's that?

21 A. A deposition written by Craig Whiteneck, a civil  
22 investigator for the EPA who researched the issue.

23 Q. Mr. Wise, you were also asked on page 286:

24 "Q. And you have no recollection whatsoever where  
25 you got that information; correct?

1 "A. No."

2 Was that truthful testimony?

3 A. Yes.

4 Q. What about a -- a report from a -- a different  
5 investigator makes you have a memory now of your source of  
6 information for that report?

7 A. What I'm saying is if I would have looked at the  
8 weather, I would have looked at the weather out of Los  
9 Angeles. I don't recall what exact source I used.

10 Q. In fact, you don't really have any idea where you got  
11 that information, do you?

12 A. I don't re -- I don't . . . uh, sorry. Uh, I don't  
13 recall where I got the information from.

14 Q. Today.

15 A. Today.

16 Q. And, in fact, did it rain the next week in Santa Barbara  
17 county?

18 A. No, sir.

19 Q. When you went onto the Bell facility in 2007, was the  
20 creek completely dry?

21 A. I would have to look at my polaroids to refresh my  
22 memory on that.

23 Q. That would be the best source?

24 A. Or -- or a log book, yeah.

25 Q. Mr. Wise, did you ever see water in the dry creek bed



1 along Palmer Road near the Bell facility other than when it  
2 was raining?

3 A. I've seen water in that creek, but I -- many times, but  
4 I cannot recall if it was raining every time.

5 Q. Is it true you can't recall a specific instance when  
6 you've seen water in the Palmer Road Creek other than when it  
7 was raining?

8 THE COURT: Wouldn't mean that he'd never seen it,  
9 hardly ever seen it? It never rains here. I mean, I  
10 don't -- he said he's seen it many times so doesn't -- by  
11 implication, doesn't that mean that it wasn't raining? I  
12 mean, this is Southern California. It doesn't rain very  
13 much, but it is -- go ahead.

14 MR. SULLIVAN: I'm just asking to confirm that he's  
15 never seen water in the Palmer Road Creek when it was not  
16 raining.

17 THE COURT: But he said he's never -- he's seen it  
18 many times. He doesn't remember whether it was raining or  
19 not.

20 MR. SULLIVAN: I'll move on, Your Honor.

21 Q. Mr. Wise, when you responded to the July 2017(sic) spill  
22 at the Bell facility, you understood that the creek into  
23 which the spill was released had historically been used to  
24 transport oil; correct?

25 A. Yes.

1 Q. Why is the dry creek bed running along Palmer Road, uh,  
2 near the Bell facility called by the locals Asphalt Creek?

3 A. I never heard the locals call it that.

4 Q. What's your understanding of why it was called that way?

5 A. It was my understanding because it had an asphaltic  
6 bottom.

7 Q. Mr. Wise, is it your testimony that the Department of  
8 Fish and Wildlife requested your involvement in supervising  
9 the clean-up of the spill from the July 2007 pipeline -- um,  
10 facility?

11 A. Yes. We got a request for assistance from California  
12 Fish and Game, now Fish and Wildlife.

13 Q. Who in particular?

14 A. Uh, I don't know. I believe that request came to our  
15 spill phone duty officer.

16 Q. When you were working on the clean-up for the July --  
17 from the July 16, 2007 pipeline spill, you suggested to  
18 Lieutenant Gross that the old, dried up oil at the bottom of  
19 the creek bed be removed; correct?

20 A. Uh, could you repeat the question?

21 Q. Sure. When you were responding to the spill on July 16,  
22 2007 from the pipeline at Bell's facilities, you suggested to  
23 Lieutenant Gross that the old, dried up oil at the bottom of  
24 creek bed needed to be removed; correct?

25 A. I don't recall. I'd to review my notes or log book

1 notes for that.

2 Q. Mr. Wise, let me show you Defendant's Exhibit 12 which  
3 has been admitted.

4 A. Excuse me, sir? Am I done with this? Can I set it  
5 aside?

6 Q. Please. Looking at the first entry on Exhibit No. 12,  
7 Mr. Wise, on January 4, 2008, did you attend a meeting of  
8 California State Assembly Joint Committee on Emergency  
9 Preparedness and Homeland Security which involved an  
10 informational meeting about HVI?

11 MR. BACHMAN: Objection, Your Honor. Relevance.

12 THE COURT: Overruled.

13 THE WITNESS: I attended a meeting in 2008, uh,  
14 with Assemblyman Nava and several other agencies in  
15 Santa Barbara county. Is that the meeting you're referring  
16 to?

17 BY MR. SULLIVAN:

18 Q. Uh, I'm first referring to the meeting -- the meeting  
19 that shows here, meeting of the California Joint Committee on  
20 Emergency Preparedness and Homeland Security.

21 A. I don't know if I attended that meeting or not. Was  
22 that -- where was the meeting held?

23 Q. I believe it would have been held in Sacramento.

24 A. I don't think that I attended that.

25 Q. By January 4th, 2008, Mr. Wise, had you heard from

1 Santa Barbara County Supervisor Kars Bedell that he wanted  
2 HVI shut down?

3 A. I don't recall that.

4 Q. Do you recall hearing that from the supervisor?

5 A. I don't recall hearing that.

6 Q. At all? Uh, did you learn on January 5th, 2008 that  
7 there had been a spill at HVI Zaca facility?

8 A. Uh, yes.

9 Q. Mr. Wise, one factor in the January 5th, 2008 spill that  
10 the alarm operator failed to notify HVI after the alarm was  
11 received; correct?

12 A. That was what was reported, yes.

13 Q. That was -- I'm sorry?

14 A. That was what was reported.

15 Q. Do you have any reason to believe that's not true?

16 A. No.

17 Q. You first arrived at the Zaca facility on January 6th,  
18 2008; right?

19 A. Correct.

20 Q. And you essentially stayed on the facility in a motor  
21 home for about the next four to six months?

22 A. Uh, roughly, yes.

23 Q. During the time frame after the January 5th, 2008 spill,  
24 were there unusually heavy rains that impeded the clean-up  
25 efforts?

1 A. Yes.

2 Q. Mr. Wise, at the January 5th, 2008 spill, did you use  
3 water sparging to remove heavy oil from the creek?

4 A. Yes.

5 Q. In using heavy water sparging to remove oil from the  
6 creek, Mr. Wise, did you, um -- did that cause old oil from  
7 below the initial spill to -- to bubble up from the bottom to  
8 the surface?

9 A. Uh, we're talking about the Zaca Creek; correct?

10 Q. Correct.

11 A. Uh, it caused oil in the creek to come up. Whether it,  
12 uh, was old oil or not, I can't answer that.

13 Q. And Mr. Wise, uh, did you coordinate a media briefing  
14 onsite at the Zaca facility on January 18th, 2008 with U.S.  
15 Congresswoman Lois Capps?

16 A. Uh, I don't remember if I specifically coordinated it,  
17 but it was coordinated.

18 Q. And, in fact, Mr. Wise, you attended a Santa Barbara  
19 County Board of Supervisors' meeting on January 15th, 2008 to  
20 tout the EPA's enforcement efforts against HVI; correct?

21 A. I attended the supervisors' meeting to provide a  
22 briefing to the supervisor on ongoing response operations.

23 Q. You were aware at this time, Mr. Wise, that California  
24 Assemblyman Pedro Nava had also started a political fight  
25 with HVI. True?

1 A. I am aware that Senator Nava had concerns over HVI, yes.

2 Q. Let me show you Defendant's Exhibit No. 35 which has  
3 been admitted into evidence. Does Exhibit No. 35 reflect an  
4 article from Assemblyman Nava in describing, um, how he  
5 wanted to start a political fight with HVI?

6 A. Yes.

7 Q. And, Mr. Wise, did you promise to scrutinize HVI?

8 A. Uh, promise to who?

9 Q. Made a statement in the -- in the -- to the press that  
10 you were promising to scrutinize the firm.

11 A. Uh, may I see the statement, please?

12 Q. Sure. If you would go to the third paragraph of page 2,  
13 Mr. Duncan.

14 A. The -- the next paragraph, uh, shows a Dan Meer, uh, was  
15 speaking. I -- it says EPA. I can't tell you for sure  
16 whether that was for me or not.

17 Q. Did you yourself want to scrutinize HVI in January 2008?

18 A. I wanted HVI to respond to the spills that, uh, were  
19 happening at their facility so we could all get out of there.

20 Q. Mr. Wise, on January 29th, 2008, did you take on  
21 spill -- on scene responsibility for clean-up at the Bell  
22 facility?

23 A. Yes.

24 Q. Would you agree that as asserted by the United States  
25 here, there was no more than 126 barrels of oil released into

1 Palmer Creek in that spill?

2 A. I would have to see the quantification numbers.

3 Q. Uh, let's show you U.S. Exhibit No. 92. And looking at  
4 the second paragraph of the second page of Exhibit No. 92  
5 there, does that refresh your recollection, Mr. Wise, that  
6 the spill involved 126 barrels?

7 A. Yes.

8 Q. Mr. Wise, it's true that you decided shortly after that  
9 January 29th, 2008 spill to try to dig out all of the  
10 hardened asphalt in Asphalt Creek; right?

11 A. No. We did an exploratory trench and then filled it  
12 back in.

13 Q. What do you mean -- so you dug an exploratory trench;  
14 right?

15 A. Yes.

16 Q. And you dug about seven feet down?

17 A. Yes.

18 Q. And what did you find?

19 A. We found there was asphaltic crude down, uh, that depth,  
20 and we stopped at that depth.

21 Q. And then did you fill the hole that you dug with  
22 concrete?

23 A. Yes.

24 Q. How much environmental harm did that cause?

25 A. Uh, which, the digging the hole or the filling with the

1 concrete?

2 Q. Start with the digging the hole.

3 A. I don't, uh -- I don't have an answer for you there. I  
4 would say it was probably minimal since we were doing  
5 clean-up in there anyway.

6 Q. How about filling it up with concrete?

7 A. We -- we used, uh, bentonite which is expanding concrete  
8 to keep seeds from coming up from there.

9 Q. How much environmental harm did that cause?

10 A. I would say probably minimum.

11 Q. Did you have people from the State Department of Fish  
12 and Wildlife telling you that your clean-up actions were just  
13 liberating old oil?

14 A. Uh, I don't recall. I'd have to look in my log book  
15 notes.

16 Q. Was there old oil seeping up from your efforts in the  
17 Fall of -- I'm sorry, in the Spring of 2008 at Palmer Road  
18 Creek?

19 A. There was old oil seeping up during clean-up operations,  
20 yes.

21 Q. Could you distinguish the old oil that seeped up during  
22 clean-up operations from any of the new oil that was being  
23 cleaned up?

24 A. No.

25 Q. Mr. Wise, you continued to be involved in political



1 meetings related to HVI, uh, March of 2008, did you not?

2 A. I don't recall.

3 Q. Let's take a look at Exhibit No. 12, again at page 4.

4 On March 3rd, 2008, did you invite, um, the county to a  
5 meeting with HVI's president?

6 A. I don't recall this, but you're saying I did so I'm  
7 assuming yes.

8 Q. Well, do you know if this is a document that was  
9 provided by the Environmental Protection Agency in response  
10 to a 30 B6 deposition notice?

11 A. I -- no.

12 Q. On March 13th, 2008, did you attend a Santa Barbara  
13 County Board of Supervisors' meeting, um, and make remarks  
14 against HVI?

15 A. I attend the supervisors' meeting and provided a  
16 briefing on ongoing response operations.

17 Q. And if you go to page 5, did you have a meeting on  
18 February -- did you on February 26th, 2008, uh, call Box --  
19 Senator Boxer and Congresswoman Capps' staff to update on  
20 activities on various Greka sites?

21 A. Uh, yes.

22 Q. And, again, on August -- if you go to page six, on  
23 August 28th, 2008, um, were you again involved talking with  
24 Senator Boxer's staff and Congresswoman Lois Capps' staff?

25 A. Yes.

1 Q. Mr. Wise, you encouraged the Santa Barbara County  
2 Department -- Fire Department to shut HVI operations down at  
3 the Zaca facility in early January of 2008; right?

4 A. Yes.

5 Q. Were you, uh, unhappy when they didn't shut down HVI for  
6 as long as you wanted?

7 A. Yes.

8 Q. Did you tell Mr. Eni Devagbyra at this time that you  
9 made a criminal referral to the EPA Criminal Division  
10 concerning the spills at HVI?

11 A. I don't recall.

12 Q. Let me ask you to take a look at pages 204, line 15  
13 through 204, line 19 and see if that refreshes your  
14 recollection.

15 A. Page 204, you said?

16 Q. Yes.

17 A. You're talking about the deposition; correct?

18 Q. Correct.

19 A. Can you give me the numbers again?

20 Q. Sure. Page 204, lines 15 through 19. In particular,  
21 you were asked did you ever threaten any Greka officials with  
22 being prosecuted and put in jail. You answered I may have  
23 told them that I made a criminal referral to the EPA Criminal  
24 division in the DA's office concerning the spills at Greka.

25 Was that truthful testimony?

1 A. Uh, as the deposition says, I may have told them that,  
2 but I don't recall the specific conversation.

3 Q. Mr. Wise, did you order HVI in the spring of 2008 to  
4 demolish the Gato ponds on its Bell facility?

5 A. Uh, no.

6 Q. Did you at any time order them to demolish the GATO  
7 ponds in the Bell facility?

8 A. Uh, the -- the order we issued them said demolish or  
9 decontaminate. Uh, Greka decided to demolish the ponds  
10 themselves.

11 Q. Did you -- after the ponds were removed, did you do any  
12 soil testing, uh, of the soil that was removed from below the  
13 ponds?

14 A. I know we were supposed to, but I honestly do not  
15 remember if we actually did it or not.

16 Q. Mr. Wise, let me show you an exhibit that's been marked  
17 as Defendant's Exhibit No. 53. Mr. Wise, is this an email  
18 you wrote to Daniel Meer of the EPA on October 1st, 2008?

19 A. Yes.

20 Q. Did you write to Mr. Meer, the EPA is the muscle behind  
21 the Greka responses, and everyone knows it?

22 A. Yes.

23 Q. What did you mean by the muscle behind the Greka  
24 responses?

25 A. Uh, EPA has, uh, resources for responding to spills that

1 the state and local agencies do not have.

2 Q. It's fair to say there was a substantial amount of  
3 government resources put towards the HVI in 2008; right?

4 A. Yes.

5 Q. And that you were speaking at press conferences  
6 routinely about the EPA's efforts.

7 A. Yes.

8 Q. Let me ask you to take a look at Exhibit No. 55.  
9 Starting with the bottom, on September 30th, 2008, Mr. Wise,  
10 did you write Mr. Dan Meer of the EPA, uh, about your  
11 attendance at a press conference concerning, uh, certain  
12 bills that were then pending in the California State  
13 Legislature?

14 A. Yes.

15 Q. And then before then, did you brief Assemblyman Nava on  
16 what to expect from the EPA?

17 A. Yes.

18 Q. You wrote Nava has been an important ally in the Greka  
19 fight. You considered, uh, that the EPA was in a fight with  
20 HVI in 2008; right?

21 A. I considered that EPA was trying to get Greka to comply  
22 with a number of orders to conduct clean-up operations.

23 Q. And you had just issued a press release saying that we  
24 were taking over Gato ponds, did you not?

25 A. Uh, we -- well . . . we took over the assessment of

1 Gato ponds. The ponds were already, uh -- been emptied by  
2 Greka.

3 Q. And you were touting that to the press. True?

4 A. We were making a press announcement about additional EPA  
5 involvement at another Greka facility.

6 Q. Uh, Mr. Wise, let me show you Defendant's Exhibit No. 56  
7 which has been admitted into evidence. Mr. Wise, this is  
8 another email that you wrote to Daniel Meer of the U.S. EPA  
9 about briefing, uh, politicians on HVI?

10 A. Correct.

11 Q. You wanted to do the briefing for Congresswoman Lois  
12 Capps yourself; right?

13 A. Yes.

14 Q. What'd you mean when you said I have some insights into  
15 the Grek -- the Greka corporate mindset at the recent  
16 activities involving their removal from U-CAL and associated  
17 leases?

18 A. I meant that based on our experience on dealing with  
19 Greka, we had a pretty good idea of what would happen every  
20 time we had a spill.

21 Q. And you had met Mr. Gruwal by then. True?

22 A. Yes, sir.

23 Q. You didn't care for him at all, did you?

24 A. I didn't really care about Mr., uh, Gruwal. He was the  
25 owner of the company, and that . . . that was it. I had

1 very little dealings with him.

2 Q. You personally did not like him, though, did you?

3 A. I don't really care one way or the other about  
4 Mr. Gruwal.

5 Q. And Mr. Wise, you yourself conducted Internet research,  
6 uh, related to Mr. Gruwal and his financial wherewithal,  
7 didn't you?

8 A. I conducted, uh, research, yes, on Mr. Gruwal and Green  
9 Dragon Gas -- excuse me, we both died on that, Green Dragon  
10 Gas, the parent company.

11 Q. Even though that wasn't your job; right?

12 A. I like to be prepared when I talk to someone I've never  
13 spoken . . . now you're makin' me do it, Counselor, spoken  
14 to before.

15 Q. In October 2010, December 21st, 2010, you responded to a  
16 spill at HVI's facility; right?

17 A. Uh, yes.

18 Q. Had you been to any of the HVI facilities at all since  
19 2010?

20 A. No.

21 Q. And were you aware of any release or discharge at HVI's  
22 facilities after December 31st, 2010 that had any impact on  
23 waters of the United States?

24 A. Uh, they had some spills. I'm not sure if they got into  
25 the waters of the U.S. or not.

1 MR. SULLIVAN: No further questions.

2 THE WITNESS: Should I leave this stuff here?

3 MR. SULLIVAN: Sure.

4 THE WITNESS: Okay. Thank you.

5 THE COURT: Go ahead, counsel.

6 REDIRECT EXAMINATION

7 BY MR. BACHMAN:

8 Q. Hello, Mr. Wise.

9 A. Hello.

10 Q. How long have you been an on scene coordinator for the  
11 Environmental Protection Agency?

12 A. Uh, approximately 16 years.

13 Q. How many oil spills have you responded to in that time?

14 A. Approximately 38.

15 Q. What factors do you consider when responding to an oil  
16 spill?

17 A. Uh, we look at numerous factors including where is the  
18 spill going, uh, what has it gotten into. Is it -- has it  
19 gotten into water or potential waters of the U.S. are does it  
20 have potential to get into waters of the U.S. Uh, we also  
21 look at other impacts like, uh, ecological impacts or  
22 environmental impact, uh, public health impacts.

23 Q. Mm-hmm.

24 A. How are we gonna get the spill cleaned up after. Is  
25 there a responsible party which is the ideal way to do it or

1 is this something where EPA is either going to have to, uh,  
2 fund the clean-up, uh, direct the using EPA contractors or  
3 some other funding mechanisms.

4 Q. And why do you look at those specific factors when  
5 responding to oil spills?

6 A. Uh --

7 MR. SULLIVAN: Okay. I'm gonna just object to the  
8 extent that he made an objection that was sustained to my  
9 inquiry about the waters of the United States and the impact  
10 of the jurisdiction.

11 THE COURT: Sustained.

12 BY MR. BACHMAN:

13 Q. Uh, are there, um, any guidelines that you follow when  
14 responding to oil spills?

15 A. Yes. We follow 40 CFR Code of Federal Regulations, part  
16 300, National Contingency Plan.

17 Q. Did you follow those guidelines when responding to  
18 spills at HVI facilities between 2005 and 2010?

19 A. Yes.

20 Q. Earlier, Mr. Sullivan asked you about the December 7th,  
21 2005 spill. Do you recall that?

22 A. Yes.

23 Q. And he also asked you about closing down the facility.  
24 Do you recall that?

25 A. Yes.



1 Q. Why did you want the facility closed?

2 A. Uh, as, uh, it was an operational oil field, and our  
3 staff was going to be working within the tank farms and the  
4 creek, it mainly was a safety issue. We didn't want the  
5 Greka folks and our folks all working on the same piece of  
6 property.

7 Q. Mr. Sullivan also asked you about liabilities of the  
8 county. Do you recall that?

9 A. Yes.

10 Q. Why did you make that statement?

11 A. Uh, at -- at the time, the County of Santa Barbara, uh,  
12 had promised us that the, uh, leases would be held -- uh,  
13 closed under the shutdown order until the clean-up was  
14 completed. And the -- they were not.

15 Q. Why is it unsafe for clean-up operations to take place  
16 while regular oil operations are taking place?

17 A. Well, you know, like any other, uh, industrial type  
18 facility, there's a lot of vehicle traffic. There's pumps  
19 operating. There's electrical. Uh, there's pumps going up  
20 and down. And, you know, I have control over the safety of  
21 the staff under my purview, but I don't have control over the  
22 staff working the oil patch.

23 Q. Mr. Sullivan also asked you about, uh, a creek known as  
24 Palmer Road Creek. Do you recall that?

25 A. Yes.

1 Q. Describe Palmer Road Creek, uh, when you first responded  
2 to it in 2007.

3 A. Yes. The creek runs, uh, along Palmer Road, uh, in a  
4 northerly direction. The creek is anywhere from a couple of  
5 feet wide to maybe ten feet wide in places. And at some  
6 points, it's on the same circus -- almost on the same surface  
7 as the road. In some cases, it goes, uh, into a deep, uh,  
8 for lack of a better term, a canyon, uh, next to the road,  
9 and some parts of the creek that has an asphalt that bottom  
10 from previous oil transportation activities.

11 Q. What happens when fresh oil, uh, meets that asphaltic  
12 bottom?

13 A. So think about the asphaltic bottom as I like to  
14 describe it as like a tootsie roll pop so you have that hard  
15 outside, and you have that soft inside, and when you put,  
16 uh -- there's a saying in science like dissolves like. You  
17 put oil on top of asphalt, it dissolves the crust on the  
18 outside, and it causes the soft inside to come out.

19 Q. Uh, Mr. Sullivan also asked you about a January 5th,  
20 2008 spill. Do you recall that?

21 A. Yes.

22 Q. Um, what did you, uh, see when you responded to that  
23 spill?

24 A. Now, during that, uh . . . that was the second Zaca  
25 spill; correct?

1 Q. That would have been the January 5th one, right.

2 A. Okay.

3 Q. Yeah.

4 A. I saw oil had migrated from the tank farm. It went down  
5 the county access road. It went under the county's, uh --  
6 county's road building through a lot where Firestone wineries  
7 serve -- uh, excuse me, stored their equipment and into a  
8 culvert and down into the tributary. And then it went down  
9 about, uh, I don't know, about one-and-a-half or  
10 one-and-a-quarter miles before it stopped.

11 Q. And why did you order sparging of the creek?

12 A. Uh, we, uh, were finding, uh, oil buried in the  
13 sediments, and it was an efficient way to drive the oil out  
14 of the sediments without removing the sediments.

15 Q. And why is that important?

16 A. Well, we wanted to minimize impact to the habitat, and  
17 there are, uh, microorganisms and such that live in those  
18 sediments.

19 Q. When responding to a spill, do you work with other  
20 organizations?

21 A. Yes.

22 Q. Uh, what involvement do you have with those other  
23 organizations?

24 A. Uh, it -- it really depends on the spill type and  
25 whether or not the EPA is spending money or not. Uh, but in

1 general, when we have multiple agencies at a spill regardless  
2 of whether it's oil or hazardous substance, we'll enter into  
3 a -- what's called the unified command under the Incident  
4 Command System. And usually, what we will see at these when  
5 we have a unified command is we will have a state incident  
6 commander, a federal incident commander, a local incident  
7 commander, and if the responsible party is actively  
8 participating in the clean-up, then we'll have an incident  
9 commander or a representative of the responsible party.

10 Q. And who gets a voice in the unified command?

11 A. Usually, all four of those parties will get a voice.

12 Q. Did you form a unified command for the January 5th, 2008  
13 spill?

14 A. Yes.

15 Q. How did, uh, the unified command -- withdrawn. Uh, what  
16 participation took place within the unified command when  
17 making decisions about clean-up for the January 5th, 2008  
18 spill?

19 A. So part of the incident command system has a document  
20 generated called the incident action plan, and it's generated  
21 as part of a, uh -- a work cycle. And the cycles can be  
22 various, uh, lengths in time depending on what the, uh --  
23 what's going on onsite. They can be very short or they can  
24 be very long. It just depends on what's going on onsite.  
25 And the agencies and if the responsible party is conducting

1 the clean-up work together to develop this incident action  
2 plan which is then executed, uh, during the operational  
3 period.

4 Q. Mr. Sullivan also asked you about the January 29th, 2008  
5 spill. Do you recall that?

6 A. Yes.

7 Q. Why did you take over that spill?

8 A. Uh, we took over that spill, uh, for, uh, several  
9 reasons. Uh, we had, uh, we had asked Greka for their new  
10 contractor to provide us with proof of compliance with HWOER  
11 pursuant to 29 CFR 1910120. HWOER stands for Hazardous Waste  
12 Operations and Emergency Response. And the, uh -- and we  
13 asked the contractor to provide us a safety plan. We  
14 reviewed the safety plan, uh, twice and found that it did not  
15 meet the requirements under HWOER, and the company filter  
16 recycling after being repeatedly told to provide their proof  
17 of compliance with HWOER failed to do that.

18 Q. Why is it important that responders have HWOER training?

19 A. Well, it's the law of the land. So it's required under,  
20 29 CFR 1910120 that, uh, anyone working on an uncontrolled  
21 hazardous waste site has to comply with HWOER.

22 Q. Why did you, uh . . . why did you, uh, dig exploratory  
23 trenches in Palmer Creek after the January 29th, 2008 spill?

24 A. Uh, we had some information from some of the local  
25 ranchers that the asphalt may go down pretty far, and we

1 wanted to see how far it actually went down, if this was  
2 gonna be an ongoing issue throughout the spill. Um, once we  
3 reached seven feet and based on the information we had, we  
4 decided there's -- there's no reason to go, uh, any farther.

5 Q. Mr. Sullivan also asked you about, um, a fire department  
6 shutdown in January 2008. Do you remember that?

7 A. Uh, yes.

8 Q. Uh, why did you want the fire department to, uh,  
9 maintain a shutdown at that time?

10 A. Uh, for the same reason I previously stated. Uh, it  
11 wasn't safe to be us running clean-up operations and Greka  
12 running their lease operations at the same time. We had a  
13 fair amount of heavy equipment out there, and it was just  
14 safer that way.

15 Q. Uh, Mr. Sullivan also asked you about the Gato ponds in  
16 2008. Do you recall that?

17 A. Yes.

18 Q. What did those look like when you first responded to  
19 them?

20 A. Uh, they were a series of concrete, uh, impoundments  
21 that contained a large quantity of, uh, crude oil, crude oil  
22 sludge. I used lubrication oil, that was a small constituent  
23 of it, and water. They were surrounded by fence and  
24 partially covered by, uh, bird netting to keep, uh, animals  
25 out. And the, uh, ponds had a number of cracks in them that

1       were leaking oil. And the ponds themselves sat about a  
2       hundred feet, uh, from the tributary to Siskwock Creek which  
3       was an extension of the Palmer Road Creek.

4       Q. And why did you order HVI to repair or destroy the  
5       ponds?

6       A. Well, the -- it was -- it . . . excuse me. It was, uh,  
7       pretty much if we had contamination underneath the ponds, we  
8       needed to make that determination, uh, whether or not, uh,  
9       there was -- had that contamination under the ponds been  
10      leaking into the soil, um, around the ponds.

11      Q. Mr. Sullivan asked you about the Santa Barbara County  
12      Board of Supervisors. Do you recall that?

13      A. Yes.

14      Q. What impact did the Santa Barbara County Board of  
15      Supervisors have on your decisions when responding to spills  
16      at HVI's facilities between 2005 and 2010?

17      A. None.

18      Q. Mr. Sullivan asked you about Congresswoman Lois Capps.  
19      Do you recall that?

20      A. Yes.

21      Q. What impact did Congresswoman Lois Capps have on your  
22      decisions when responding to oil, uh, discharges at HVI  
23      facilities between 2005 and 2010?

24      A. None.

25      Q. Why?

1 A. Because I don't really work directly for the  
2 congresswoman or -- nor do I work directly for the  
3 supervisors.

4 Q. And -- and -- thank you. And, uh, Mr. Sullivan also  
5 asked you about Congresswoman Boxer. What impact did she  
6 have on decisions that you made when responding to oil spills  
7 at HVI facilities between 2005 and 2010?

8 A. None.

9 Q. And why is that?

10 A. Uh, again, she was not in my direct chain of command and  
11 really has no impact on our operations.

12 MR. BACHMAN: No further questions, Your Honor.

13 THE COURT: All right.

14 MR. SULLIVAN: Nothing further, Your Honor.

15 THE COURT: Okay. The witness is excused.

16 I think we'll take our afternoon break. Uh, why  
17 don't we take a ten-minute break.

18 THE CLERK: This court is in recess.

19 (Recess taken.)

20 THE COURT: We're back on the record.

21 Is everyone ready to proceed at this time?

22 Call your next witness.

23 MR. FORSYTHE: Thank you, Your Honor.

24 Plaintiffs would like to jointly call our next  
25 witness Dr. Mace Barron to the stand.



1 THE CLERK: Please raise your right hand.

2 (Witness sworn.)

3 MR. FORSYTHE: May I approach the witness,  
4 Your Honor?

5 THE COURT: Yes.

6 THE CLERK: Please state your name for the record  
7 and spell your last name.

8 THE WITNESS: Mace Gerald Barron B-a-r-r-o-n.

9 MR. FORSYTHE: Please let the record reflect that I  
10 provided a copy of Dr. Barron's trial declaration which is  
11 Docket 435-1 to the witness.

12 DIRECT EXAMINATION

13 BY MR. FORSYTHE:

14 Q. Good afternoon, Dr. Barron.

15 Is the document you're holding the trial  
16 declaration you submitted in this litigation?

17 A. Yes.

18 Q. And do you adopt your trial declaration as your sworn  
19 testimony under oath in this case?

20 A. I do.

21 Q. Dr. Barron, can you confirm the trial declaration you're  
22 holding has several redactions to your attached expert report  
23 and if you look at the page numbers in the top corner, ECF  
24 page numbers 1040 and 55 through 67.

25 A. Yes.

1 Q. And can you confirm that those redactions are references  
2 to an August 8, 2005 oil spill which the United States and  
3 the State are not pursuing claims on?

4 A. Correct.

5 MR. FORSYTHE: Thank you. Pass the witness.

6 I apologize, Your Honor. I forgot --

7 THE COURT: I'll admit the declaration and the  
8 exhibits.

9 MR. FORSYTHE: Thank you, Your Honor.

10 CROSS-EXAMINATION

11 BY MR. DIAMOND:

12 Q. Good afternoon, Dr. Barron. How are you today?

13 A. Fine. Thank you.

14 Q. I understand that you are currently a research  
15 toxicologist with the United States Environmental Protection  
16 Agency; is that correct?

17 A. Correct.

18 Q. Specifically, you are senior scientist at the EPA's Gulf  
19 Ecology Division within the Office of Research and  
20 Development; correct?

21 A. Correct.

22 Q. You've worked with EPA in various positions since 2003;  
23 correct?

24 A. Correct.

25 Q. Do I understand correctly that your primary

1 responsibility is in the research and development area?

2 A. Uh, correct.

3 Q. And you were asked by the United States government in  
4 this case to provide an expert report on the ecotoxicological  
5 impacts of certain oil spills in the area of Santa Maria,  
6 California; correct?

7 A. Correct.

8 Q. Is ecotoxicological is that just another way of saying  
9 the environmental impact from a chemical or a toxicological  
10 standpoint as a result of the spills?

11 A. Yeah. In a simple sense, yes.

12 Q. You're not an expert in oil field operations of any  
13 kind; true?

14 A. That's correct.

15 Q. And you're also not an expert in hydrology; correct?

16 A. That's correct.

17 Q. For example, you did not conduct any studies or do any  
18 analyses as to how many days a year there might be water in  
19 the creek areas that were the subject of your report;  
20 correct?

21 A. That's correct.

22 Q. Now, you were asked by the government to provide your  
23 expert opinions on this subject some time in 2014; correct?

24 A. That's my recollection.

25 Q. And you ultimately you prepared a report dated

1 February 7, 2017; is that right?

2 A. Correct.

3 Q. During 2014 and 2015, you made three visits to the areas  
4 of the spills; true?

5 A. Correct.

6 Q. You had never made any visits to the areas of the spills  
7 in connection with litigation prior to 2014; right?

8 A. I did not.

9 Q. And that's because you hadn't been engaged as an expert  
10 in any way with litigation until 2014; correct?

11 A. That's correct.

12 Q. So just to be clear for the record, you did not  
13 personally have any involvement in doing any work of any kind  
14 related to the subject spills in this case prior to 2014?

15 A. That's correct.

16 Q. And the spills we're talking about here that are the  
17 subject of your opinions in this case all occurred between  
18 2005 and 2009; is that right?

19 A. Yes.

20 Q. So you were not onsite either during or any time after  
21 those subject spills until some time in 2014; right?

22 A. That's correct.

23 Q. And so again to be clear, you didn't have -- you don't  
24 have any actual factual knowledge either before, during or  
25 for a period of years after the spills. Everything that you

1 learned in connection with your report took place starting in  
2 2014; right?

3 A. That's correct.

4 Q. Now, with respect to your first onsite visit, that was  
5 done on April 30th of 2014.

6 A. Uh, I believe so.

7 Q. And on that trip, uh, well, let's pull up U.S.  
8 Exhibit 2690 which has been admitted into evidence. And this  
9 Exhibit 2690, Dr. Barron, is this your report, your expert  
10 report in this case?

11 A. Yes.

12 Q. And it's -- it was signed on February 7, 2017?

13 A. Correct.

14 Q. If we can turn to page 9, please Section 5.3 called Site  
15 Visits.

16 So we're back now to your first site on April 13,  
17 2014. And on that trip you observed areas adjacent to and  
18 down gradient of the Bell and Davis facilities with members  
19 of HVI's case team; correct?

20 A. Uh, member with the government's case team.

21 Q. Was there anyone there from, well, for example, under  
22 Section 5.3 of your report, the first bullet on April 30,  
23 2014 says you were there with members of the Greka case team;  
24 is that right?

25 A. What I meant referring to the Greka team was the

1 government's Greka case team.

2 Q. Oh, okay. Just so there's no confusion when I ask you  
3 questions to make sure you understand when there's reference  
4 to HVI or of Greka that's one in the same company. We can  
5 use that interchangeably. Is that acceptable?

6 A. Yes.

7 Q. Now, your second visit to the site was on December 11th  
8 and 12, 2014; is that correct?

9 A. Yes.

10 Q. And during that visit you viewed the Bell and Davis site  
11 facilities; correct?

12 A. Yes.

13 Q. And in that visit as well you also observed down  
14 gradient areas as well as apparent hydrological connections  
15 of stream channels; correct?

16 A. Yes.

17 Q. And that was along with, at that point was that with the  
18 same members as you described the Greka team being EPA people  
19 or is that with people from Greka Oil and Gas?

20 A. For the hydrological connections visits, my recollection  
21 is it was just myself and Dr. Lee.

22 Q. Okay. Your third visit was on April 23rd, 2015. True?

23 A. Yes.

24 Q. And on that visit you observed areas adjacent to and  
25 down gradient of the Bell and Davis facilities, but also the

1 potential habitat areas of the California tiger salamander;  
2 correct?

3 A. Yes.

4 Q. Did you conduct your observations, Dr. Barron of the  
5 surrounding natural areas by foot or by vehicle?

6 A. Both.

7 Q. And what approximate distance would you say you covered  
8 of the surrounding natural areas to the Bell and Davis  
9 facilities?

10 A. Um, I -- I don't recall the specifics, but it would have  
11 been many miles.

12 Q. And so when you say many miles, I take it that a good  
13 portion of that was done in some kind of a vehicle; correct?

14 A. Correct.

15 Q. And how often did you get out and walk the land?

16 A. Frequently.

17 Q. And when you walked, how far do you walk typically?

18 A. Again, this was on my recollection from three-and-a-half  
19 years ago so a hundred yards, 200 yards.

20 Q. Were you looking for anything in particular when you got  
21 out to walk?

22 A. Yes.

23 Q. What were you looking for?

24 A. Uh, it would depend on, um, so when I -- on part of the  
25 visit with Andrea Adams, a U.S. government expert in

1 endangered species, we were looking at, uh, specifically for  
2 the types of habitat, signs of wildlife, track, scat, things  
3 like that. Also, she was pointing out areas of potential  
4 habitat for the two endangered species.

5 Q. Did you take notes?

6 A. I did.

7 Q. Did you keep those notes or discard them?

8 A. Uh, I believe I kept them.

9 Q. Do you know where they are today?

10 A. Uh, I believe they're in my office in Gulf Breeze,  
11 Florida.

12 Q. You didn't take any environmental samples of any kind  
13 during any of your three visits, did you?

14 A. I did not.

15 Q. Would it be fair to say that in connection with all  
16 three onsite visits cumulatively, you covered a substantial  
17 amount of the subject property areas that potentially could  
18 have been impacted by the HVI releases?

19 A. Of the subject releases, yes.

20 Q. You didn't feel the need to ever go back and inspect or  
21 observe the subject property areas for a fourth time?

22 A. Um, I, uh, I had asked the -- our case team about the  
23 potential of visiting again not to look for residual injury,  
24 but rather just to refamiliarize myself with the locations  
25 and that -- I did not make that trip.



1 Q. But in other words, in order to complete your report to  
2 your satisfaction, you felt you had made enough site visits.

3 A. Correct.

4 Q. And in forming your expert opinions in connection with  
5 this litigation, you reviewed documents related to the  
6 subject spills at the HVI Bell and Davis facilities including  
7 incident investigation and biological reports and documents  
8 related to toxicity and chemical characterization of crude  
9 oil and produced water; correct?

10 A. That's correct.

11 Q. In connection with your expert report and opinions in  
12 this case you, did not undertake any effort to quantify in  
13 dollars the amount of any environmental harm caused by the  
14 subject HVI spills. True?

15 A. That's correct.

16 Q. And you were not asked to do so by the United States  
17 government; correct?

18 A. Correct.

19 Q. Indeed quantification of dollars of any environmental  
20 harm is simply not in your area of expertise; correct?

21 A. That's correct.

22 Q. And you did not personally conduct any empirical or  
23 other studies to form the expert opinions in your report?

24 A. No empirical studies, no.

25 Q. And you did not conduct any testing as part of the

1 preparation of your expert report; correct?

2 A. I did not.

3 Q. And you also did not personally conduct as part of your  
4 expert work the environmental recovery time analysis for any  
5 of the HVI releases at issue; correct?

6 A. That's correct.

7 Q. And again that's because you don't profess to be an  
8 expert in determining environmental recovery time from an  
9 inland oil spill. True?

10 A. That's correct.

11 Q. In connection with your three onsite visits, you did not  
12 personally observe any wildlife that you concluded had been  
13 harmed by the subject HVI spills; correct?

14 A. That's correct.

15 Q. You did not personally observe any tiger salamanders or  
16 red-legged frogs that had been harmed by any of the HVI  
17 releases. True?

18 A. That's correct.

19 Q. I'm going to direct you to your prior testimony in  
20 Paragraph 7 where you state that it is unclear if the  
21 threatened California tiger salamander and California  
22 red-legged frog were directly harmed by the spills. Do you  
23 see that?

24 A. I do.

25 Q. But you have no -- absolutely no evidence of any kind

1 that any such species was actually harmed; correct?

2 A. That's correct.

3 Q. So we all are crystal clear on this point even if the  
4 HVI Bell and Davis facilities are within the potential range  
5 of habitat for those species as you previously testified, you  
6 have no knowledge of any actual harm to the species; correct?

7 A. That's correct.

8 Q. In addition as part of your expert report and opinions,  
9 Dr. Barron, you have not formed an opinion one way or the  
10 other whether there's any ongoing residual harm to the  
11 environment as a result of the HVI releases. True?

12 A. That's correct.

13 Q. And at least one of the reasons you don't have any  
14 opinion with respect to the ongoing harm from those releases  
15 is because in connection with your three site visits, you  
16 simply didn't personally observe anything that lead you to  
17 conclude there was ongoing harm; correct?

18 A. That's correct.

19 Q. And you have not formed any opinion one way or the other  
20 from your various onsite visits whether any of the plants,  
21 trees or bushes were incurring any ongoing harm as a result  
22 of the HVI releases. True?

23 A. That's correct.

24 Q. Let's take a look at U.S. Exhibit 2690 please at  
25 page 11. Now, in your -- I'm going to get this to in a

1 moment, Dr. Barron, but in your written report you state that  
2 the impacted areas of the spill have been reported to provide  
3 habitat for a diversity of wildlife including insects,  
4 spiders, lizards, snakes, California quail, doves, crows,  
5 ground squirrels, turkey vultures, song birds, red-tail hawk,  
6 owls, mice, rabbits, squirrels, raccoon, skunk, deer, black  
7 bear, mountain lion, wild pig, American badgers, flycatchers,  
8 kestrels, road runners, wood rats, opossums and coyote;  
9 correct?

10 A. Correct.

11 Q. Now, you're referring there, and I apologize for giving  
12 that long list, but there's a reason I'm doing so. You're  
13 referring there to the kinds of wildlife; correct, that can  
14 be found in that habitat? Not anything to do with the  
15 wildlife that was actually harmed as a result of those HVI  
16 releases; correct?

17 A. Um, that's partially correct.

18 Q. Okay. And what part is not?

19 A. Uh, I believe it was the, um, Davis tank battery spill  
20 where there was reported some of those species were  
21 reportedly killed.

22 Q. Okay. I'm glad you mentioned that. I'm gonna get to  
23 that in a moment.

24 Let's take a look at page 12 of your report at  
25 Section 6.4 where you state that the stream and riparian

1 habitats and multiple species of wildlife have been harmed  
2 from spills of oil and produced water from the Greka Bell and  
3 Davis facilities. Do you see that?

4 A. Yes.

5 Q. Then you refer on top of the next page, page 13, to what  
6 has been marked as Figure 1 that you prepared; correct?

7 A. Yes.

8 Q. And Figure 1 this is a conceptual model. True?

9 A. Yes.

10 Q. Meaning that the model represents what you believe in  
11 your opinion is the potential harm or could be the potential  
12 harm to habitat not any actual harm to habitat in this case;  
13 is that right?

14 A. Uh, not exactly.

15 Q. And so what do you mean by not exactly?

16 A. So first of all, what this diagram represents is a model  
17 of the pathways from the source to harm. And it provides the  
18 ways that the three types of stressors involved can cause  
19 harm. And so the purpose is to not to depict the extent of  
20 harm, but rather the pathways of harm.

21 Q. Okay. And again when you say can cause and you're  
22 delineating the pathways as you call them, you're still  
23 talking about a conceptual potential harm and this is not  
24 diagraming some actual harm that was found; correct?

25 A. That's correct.

1 Q. Another way of putting your Figure 1 is that the model  
2 illustrates the ways in which released oil could potentially  
3 harm the environment through various pathways.

4 A. As well as produce water and as well as collateral  
5 damage from clean up actions.

6 Q. Okay. But it doesn't illustrate computationally what  
7 actually occurred with the HVI releases in this case;  
8 correct?

9 A. That's correct.

10 Q. You did not conduct any actual tests or run any samples  
11 to determine the toxicity of the oil release by HVI; correct?

12 A. I did not.

13 Q. And you never conducted any testing or sampling  
14 concerning the salinity levels in the soils allegedly  
15 impacted by the HVI releases. True?

16 A. I did not.

17 Q. And you did not conduct any testing or sampling of the  
18 levels of any constituents of oil or produced water in the  
19 areas that were allegedly impacted by the HVI releases.  
20 True?

21 A. I did not perform any testing.

22 Q. Let's go to page 13 of the report. We're on U.S. 2690.

23 Now, you mentioned a few moments ago, Dr. Barron,  
24 there was harm to some number of species. So now I want to  
25 direct you to page 13 of your report. And is it true that

1 the only -- the actual harm to species from the HVI releases  
2 that you're aware of and that are referenced in your report  
3 is contained here where you say observations of dead and  
4 oiled animals and included insects, reptiles, birds and  
5 mammals; correct?

6 A. Correct.

7 Q. And then next to that statement, you have example and  
8 then you have a number. And that number 010508 Davis that  
9 refers to the investigative report that was prepared by the  
10 California Department of Fish and Game from the January 5th,  
11 2008 Davis tank battery; correct?

12 A. Correct.

13 Q. Let's go to U.S. Exhibit 0257, please.

14 Let me ask you this, Dr. Barron, if you recall.  
15 Isn't it true, well, first, so the information that you  
16 garnered and put into your expert report with respect to harm  
17 to species came from the January 5th, 2008 investigative  
18 report that was done by Fish and Wildlife; correct?

19 A. Are you asking me inclusive of all the spills or just  
20 for this particular spill?

21 Q. For all the spills that you're aware of.

22 A. No. There's other -- there were other reports of, I  
23 believe, other reports that I cited for dead animals.

24 Q. Okay. But wasn't referenced in the paragraph we just  
25 looked at; right? It was just January 5th, 2008.

1 A. If you go back to that, you'll see that it's EG. That  
2 means for example not inclusively.

3 Q. And where would we find in your report these other  
4 examples?

5 A. You would go to my Appendix D-1. I believe there's a  
6 table in there if you'd allow me, I can point it out to you.

7 Q. Sure. So let's get to that in a moment.

8 With respect to the January 5, 2008 that we've been  
9 talking about report, that involved an investigative report  
10 where it was found that one, an owl had inadvertently flew  
11 into a clean up bin. Do you recall that?

12 A. I don't recall that.

13 Q. And do you recall that in reviewing that report in  
14 preparing your report, it also was found one dead red-tail  
15 hawk, one small passerine bird, a black racer snake, three  
16 western fence lizards and a striped skunk. Do you recall  
17 that?

18 A. I do.

19 Q. And I'm not trivializing the death of any creature on  
20 this earth, but I want to have an accurate record here. You  
21 don't have any knowledge from any report that you've read or  
22 otherwise of any harm to any mammals such as mountain lions,  
23 black bear, badgers, coyote or any mammal of any kind other  
24 than the one striped skunk, do you?

25 A. No, no direct evidence.



1 Q. We can go back to Exhibit 2690, please. Dr. Barron's  
2 report on page 13, please.

3 On page 13 of your, Dr. Barron, the second sentence  
4 we hadn't got to yet says however, it is unclear if species  
5 such as CTS and RLF have been harmed by Greka spills. What  
6 does CTS stand for?

7 A. California tiger salamander.

8 Q. And the RLF is the red-legged frog; correct?

9 A. Correct.

10 Q. But you have no evidence of any kind, again, that those  
11 species were actually harmed; correct?

12 A. I do not.

13 MR. DIAMOND: I'll pass the witness.

14 REDIRECT EXAMINATION

15 BY MR. FORSYTHE:

16 Q. Dr. Barron, you were asked about Figure 1 in your expert  
17 report and I'd like to direct you there. It's on page 13.  
18 Again, the page number is up in the corner. Do you have it  
19 there?

20 A. I see it.

21 Q. Thank you. And you were asked about the concept of  
22 conceptual or potential harm versus actual harm. And so I'd  
23 like to just walk through, um, walk through your Figure 1  
24 here and ask you a few questions.

25 So starting in the upper right-hand corner, we have

1 the word produced water. Did you in your analysis look at  
2 any evidence that would have suggested actual harm was caused  
3 by produced water?

4 A. Yes.

5 Q. And could you tell us what that was?

6 A. Yeah. So, uh, in assessing the harm or potential harm  
7 or likely harm from produced water, there was several lines  
8 of evidence that I considered and I relied upon. One was  
9 looking at the constituency of the produced water. This  
10 included both its total salinity as well as the specific ion  
11 composition of the material. And the information I relied on  
12 were included various state reports, Greka documents that  
13 characterized the produced water both in spill water samples  
14 as well as historical samples from the fields.

15 So then I compared those levels to what, for  
16 example, levels of chloride that would be considered to be  
17 safe levels in the environment and also just general levels  
18 of salinity tolerance for plants and terrestrial drinking  
19 water and fresh water organisms and determined that produced  
20 water could potentially cause harm through two different  
21 mechanisms.

22 One, being salinization of the soil by the produced  
23 water being retained in the environment. My understanding  
24 from my assessment was that little -- little of the produced  
25 water was actually removed from the environment, and then it

1 moved into the stream bed. And then two, that the  
2 composition in addition to containing some hydrocarbons  
3 related to the oil in the produced water, there was also  
4 other elements that could be toxic under certain scenarios.

5 Q. And so, again, all that data and information you've just  
6 described that you examined, did it lead you to form an  
7 expert opinion about whether releases of produced water in  
8 HVI's spills did, in fact, cause any environmental harm?

9 A. Yeah, I did. I considered it to cause extensive harm  
10 because of the high salinity, the ion composition of the  
11 produced waters and the apparent lack of removal from the  
12 environment.

13 Q. And then moving across your Figure 1 to the oil heading,  
14 I would ask the same question which is all the data you  
15 looked at regarding the oil that was discharged in HVI  
16 spills, did that data lead you to form an expert opinion as  
17 to whether there was any actual injury to the environment as  
18 a result of oil releases?

19 A. It did. And as this diagram shows if you look in the  
20 gray middle part, starting with oil, oil can cause adverse  
21 impacts through two processes. One is just physical coating  
22 and there was numerous, uh, State reports that said that the  
23 stream environment were oiled. There was some limited  
24 reports of wildlife that were oiled.

25 I did want to comment on that, if I may, on the

1 wildlife oiling. That the actual observations of oiled  
2 wildlife during a spill is well understood to be a vast --  
3 likely vast underestimate of the actual dead bodies in the  
4 environment. And this is because oil causes delayed  
5 mortality. There's also predation of killed organisms.

6 Also, uh, typically organisms, especially smaller  
7 organisms may be difficult to see. And so when in  
8 considering that there was direct environmental harm from  
9 physical oiling in the -- from the Greka releases, I  
10 considered there was injury beyond the few, relatively few  
11 reported wildlife deaths.

12 The other thing is being an expert in oil  
13 toxicology, I understand that oil can also cause systemic  
14 poisoning such as ingestion or loss of thermal insulation and  
15 things like that. So those are the two subsequent things the  
16 physical stress and hydrocarbon toxicity and so those also  
17 lead me to believe that there would be extensive  
18 environmental harm from the physical oiling and potential oil  
19 toxicity.

20 And the line of evidence I observed was reading  
21 multiple reports, photographic evidence as well as the  
22 written documentation that of eyewitnesses that there was  
23 extensive sections of the tributary to Zaca Creek and the  
24 Palmer Road tributary that were physically oiled.

25 Q. Okay. Then moving to the last item here in your

1 Figure 1 response clean up, same question again. Did you see  
2 in your analysis any evidence to suggest that actual  
3 environmental harm was caused as a result of response and  
4 clean up?

5 A. I did. Um, there was both, again, in the State reports  
6 that I relied on, there was numerous instances where there  
7 was heavy machinery moved into the creek areas to facilitate  
8 oil removal. Also, multiple responders in the area and those  
9 create an environmental disturbance and damage. There were  
10 also reports of accelerated stream bank erosion. And so  
11 together I, uh, in my opinion, I developed that there was  
12 also extensive harm just from the remedial activities  
13 associated with the Greka releases.

14 Q. Okay. And you were asked a moment ago on the red-legged  
15 frog and tiger salamander references in your report and about  
16 your statements that it was unclear whether those species  
17 were in fact impacted. Why did you include them in your  
18 report?

19 A. Um, for -- so I included consideration of red-legged  
20 frog and tiger salamander for a couple reasons. One, they  
21 are, you know, a listed species -- a species of concern, you  
22 know, within the region. They're, you know, in the area not  
23 in proximity, but in the area there is designated federal  
24 critical habitat. That's one of my -- the map locations in  
25 one of my components of my report.

1           And also in speaking with the U.S. Wildlife  
2     fisheries and wildlife experts at the Ventura field office,  
3     they provided me a map which is also excerpted in my report  
4     and providing me an understanding that there would be  
5     occurrences of these two species outside of designated  
6     federally listed critical habitat. And so I considered that  
7     important as a consideration in developing my opinion.

8     Q.   And you were asked about -- to confirm that you didn't  
9     attempt to monetize environmental harm in this case and I  
10    wanted to touch on that as well. So is it fair to say that  
11    your expert opinion as to environmental harm is a qualitative  
12    assessment?

13    A.   That's correct.

14    Q.   And why didn't you perform a quantitative assessment in  
15    this case?

16    A.   So the reason I didn't perform a quantitative assessment  
17    is, uh, one, is when I was asked to assess environmental  
18    harm, it was many years after the spill events. And, uh, so  
19    I didn't have the opportunity to collect necessary or  
20    critical environmental data to quantify environmental harm at  
21    the time of the spills or in close proximity in time and  
22    space to the spills so that's one.

23           The other one is that I -- in the information that  
24    was available to me or the information that I understood  
25    existed, there wasn't sufficient information to -- for me

1 personally to quantify injuries because I would have  
2 required, personally having done this in the past prior to  
3 joining EPA, I did that type of work.

4 And we would require things like toxicity tests,  
5 soil monitoring, um, population monitoring, looking at  
6 resident's time of carcasses in the environment so that we  
7 could extrapolate to what we actually saw dead in the  
8 environment to what actually might have been harmed in the  
9 environment. So those, in my expert opinion, those necessary  
10 elements were not available to me.

11 But if I'm allowed, I would like to comment that,  
12 you know, in my practice as a expert in ecological risk  
13 assessment, it is a very common practice and there's guidance  
14 that where qualitative assessments are routinely performed  
15 and routinely considered to be reliable assessments.

16 Q. And that was gonna be -- my next question was gonna be I  
17 believe you testified a minute ago that you're not -- your  
18 area of expertise does not include monetization of  
19 environmental injury. I think that was your testimony;  
20 right?

21 A. That's correct.

22 Q. Okay. And so then, um, but the analysis you did here,  
23 this qualitative analysis, it is inside your area of  
24 expertise?

25 A. Absolutely.

1 Q. Yeah. And, again, perhaps I've already said it, but a  
2 qualitative assessment of this kind, a qualitative assessment  
3 of environmental harm is something that would commonly be  
4 generated by an expert in the field of ecotoxicology?

5 A. That's correct. I considered my report a fair, accurate  
6 and reliable estimate of harm from these spills.

7 MR. FORSYTHE: And, Your Honor, if I could have  
8 just a moment to confer with colleagues?

9 THE COURT: Go ahead.

10 MR. FORSYTHE: And, Your Honor, again, I apologize  
11 for botching the tender of Dr. Barron's testimony. I just  
12 want to confirm that we are offering him as an expert  
13 witness. I failed to say that so I apologize.

14 THE COURT: All right.

15 MR. DIAMOND: A few more questions, Your Honor.

16 THE COURT: Okay. Go ahead.

17 RECROSS-EXAMINATION

18 BY MR. DIAMOND:

19 Q. Dr. Barron, I think you just stated when you were asked  
20 about produced water that it was your opinion that it  
21 potentially could cause harm from salinization. Did I get  
22 that right?

23 A. That's correct.

24 Q. Yet you also agree, sir, do you not, that you conducted  
25 no tests of any kind whatsoever or sampling concerning



1 salinity levels in the soils impacted by the HVI releases;  
2 correct?

3 A. Correct.

4 Q. And you also mentioned ion content. I know you said you  
5 didn't conduct any testing, but let's, uh, I want to be  
6 specific about this. You did not conduct any testing or  
7 sampling of any of the areas allegedly impacted by the HVI  
8 releases to determine levels of chloride as well; correct?

9 A. That's correct.

10 Q. Nor did you conduct any testing of the areas allegedly  
11 impacted by the HVI releases to determine whether they had  
12 elevated levels of metal; correct?

13 A. That's correct.

14 Q. And when you were just responding to my esteemed counsel  
15 about oil, you talked about hydrocarbon toxicity that lead  
16 you to believe that there might be harm to the environment;  
17 correct?

18 A. Correct.

19 Q. But there's no actual evidence taken by you or anything  
20 that you gathered from others, right, showing actual toxicity  
21 to specific animals or wildlife; isn't that right?

22 A. I made that scientific inference based on the weight of  
23 evidence presented to me.

24 Q. Okay. And when you observed the vast amount of the  
25 habitat property that you did in the three site visits, we

1 agree that was more than five years after the last HVI  
2 release at issue here and you personally observed or found no  
3 dead wildlife; correct?

4 A. Uh, I think your question was related to Greka releases.

5 Q. Yes.

6 A. Yeah, correct.

7 MR. DIAMOND: No further questions, Your Honor.

8 THE COURT: Anything else?

9 MR. FORSYTHE: If I may offer just one more  
10 redirect question?

11 THE COURT: Go ahead.

12 FURTHER REDIRECT EXAMINATION

13 BY MR. FORSYTHE:

14 Q. Dr. Barron, you were asked about whether you conducted  
15 testing of salinity levels and ion content and a number of  
16 other areas. I just wanted to clarify in conducting your  
17 analysis, did you consider any evidence that was gathered by  
18 others, any testing that was conducted by others in reaching  
19 your expert opinions you offered to the Court today?

20 A. I did.

21 MR. FORSYTHE: Thank you. No further questions.

22 MR. DIAMOND: No further questions, Your Honor.

23 THE COURT: Okay. The witness is excused.

24 Go ahead.

25 MR. ZARRO: Your Honor, to accommodate a witness,

1 we would like to call Becky Stanton as our next witness and  
2 have Mr. Kharaka testify afterwards; is that okay.

3 THE COURT: That's fine.

4 MR. ZARRO: So we would like to call Dr. Becky  
5 Stanton to the stand, the State of California would. Thank  
6 you, Your Honor.

7 THE CLERK: Please raise your right hand.

8 (Witness sworn.)

9 THE CLERK: Thank you. Please have a seat.

10 Please state your name for the record and spell  
11 your last name.

12 THE WITNESS: Rebecca, I also go by Beckye, Stanton  
13 S-t-a-n-t-o-n.

14 DIRECT EXAMINATION

15 BY MR. ZARRO:

16 Q. Good afternoon, Dr. Stanton.

17 Were you asked to provide natural resource damage  
18 assessment for oil spills for use in this case?

19 A. Yes.

20 Q. Were you also asked to provide an expert opinion in this  
21 matter?

22 A. Yes.

23 MR. ZARRO: Your Honor, I understand that counsel  
24 has agreed that Dr. Stanton may proceed under 702 as an  
25 expert witness, may she?

1 THE COURT: Yes.

2 MR. ZARRO: Thank you, Your Honor.

3 I also have with me Document 344-5 which is the  
4 corrected trial declaration of Beckye Stanton and the natural  
5 resource damage assessments that are Exhibit U.S. 1424,  
6 U.S. 1141, U.S. 0384, U.S. 0063.

7 May I approach the witness, Your Honor?

8 THE COURT: Yes.

9 BY MR. ZARRO:

10 Q. Dr. Stanton is that the trial declaration you provided  
11 in response to State of California request for an expert  
12 opinion in this matter?

13 A. Yes, although there's also an Attachment 6, but yes.

14 Q. And are the four Exhibits U.S. 1424, U.S. 1141,  
15 U.S. 0384 and U.S. 0063, the natural resource damage  
16 assessment that you prepared on March 26, 2009?

17 A. Correct.

18 Q. Do you adopt the declaration and associated exhibits as  
19 your testimony in this case?

20 A. Yes.

21 MR. ZARRO: Your Honor, I ask that the declaration  
22 and the exhibits be moved into evidence.

23 THE COURT: So admitted.

24 MR. ZARRO: I also ask that the exhibits, the  
25 remaining exhibits, which have been admitted either by

1 stipulation or court order, the remaining exhibits to  
2 Dr. Stanton's declaration be admitted into evidence at this  
3 time.

4 THE COURT: They're admitted.

5 MR. ZARRO: Thank you, Your Honor. Pass the  
6 witness.

7 MR. DIAMOND: Counsel, can I just ask you what the  
8 attachment was to declaration?

9 THE COURT: It looks like something may have been  
10 inadvertently stapled.

11 MR. ZARRO: Can I approach the witness?

12 THE COURT: Go ahead.

13 MR. ZARRO: It was the cover sheet of the  
14 declaration of another witness.

15 THE COURT: That's what I thought.

16 MR. DIAMOND: I just needed to know what it was.

17 THE COURT: No, no. I did, too.

18 Go ahead, Counsel.

19 CROSS-EXAMINATION

20 BY MR. DIAMOND:

21 Q. Good afternoon, Dr. Stanton.

22 As I understand it, you were staff toxicologist for  
23 the California Department of Fish and Game now known as Fish  
24 and Wildlife from 2007 to 2016; is that correct?

25 A. Yes.

1 Q. And throughout the day, we've been calling the  
2 Department of Fish and Game now known as Department of Fish  
3 and Wildlife just Wildlife. Is that acceptable to you?

4 A. Yes.

5 Q. You have PhD in pharmacology and toxicology from the  
6 University of California at Davis; correct?

7 A. Yes.

8 Q. And you were requested by Wildlife to provide expert  
9 opinions related to four releases.

10 1. The July 16, 2007 Bell Family Line release.

11 2. The December 7, 2007 release, Blockman Ponds  
12 release.

13 3. The January 5th, 2008 Davis Tank Battery  
14 release.

15 4. The January 28, 2008 Bell Upper Pond release;  
16 is that correct?

17 A. Yes. Although, my understandings is the corrected date  
18 is January 29, 2008 for that last spill.

19 Q. Even though January 28, 2008 may be in prior direct  
20 testimony is that what you're saying?

21 A. Um, I think the declaration in and of itself has the  
22 January 29th date, but the report, um, dated -- damage  
23 assessment report dated March 26th has the January 28th date.

24 Q. And we're just clarifying the correct date is  
25 January 29th; right?

1 A. That's my understanding.

2 Q. And specifically you were asked to provide your  
3 assessment and quantification of the natural resource damages  
4 caused by these four releases of crude oil and produced water  
5 into the Live Oak riparian habitat reportedly associated with  
6 the Santa Maria River watershed and the Santa Ynez River  
7 watershed; correct?

8 A. Um, as well as the response impact. Correct.

9 Q. And in connection with your expert report and opinions,  
10 your assessment was directed to the injury to the habitat and  
11 the cost necessary to compensate for the interim loss of  
12 ecological services that would have been provided but for the  
13 spills until the injured habitat fully recovered to its  
14 baseline condition; correct?

15 A. Correct.

16 Q. And you did this assessment using a methodology known in  
17 your industry as the Resource Equivalency Analysis or REA; is  
18 that right?

19 A. Correct.

20 Q. In doing your assessment with respect to all of these  
21 releases, do I understand correctly that you not only took  
22 into account in assessing the level of injury to the two Live  
23 Oak riparian tributaries, but the impact of the oil and  
24 produced water to the habitat and the impact of the response  
25 efforts?

1 A. To those habitats, correct.

2 Q. In other words, you took into account both the level of  
3 injury as well as the response efforts?

4 A. Well, the level of injury includes impacts from the  
5 response.

6 Q. Okay. And you also took into account that in connection  
7 with these creeks impacted by the releases, that there had  
8 been subsurface asphaltic residues from historical oiling;  
9 correct?

10 A. For the Palmer Road creek.

11 Q. For the Palmer Road creek. Okay. Is that another way  
12 of saying that you recognize that there was subsurface oil  
13 and sedimentary deposits in the creeks from spills that  
14 predated anything to do with the spill that with respect to  
15 Palmer Road creek?

16 A. As far as baseline condition prior to those individual  
17 spills.

18 Q. In other words, yes. Right? To my question, you took  
19 into account --

20 A. Can you rephrase the question, please?

21 Q. Sure. You recognized that there was subsurface oil and  
22 sedimentary deposits in the creeks that predated or may have  
23 had nothing whatsoever to do with the spills that you were  
24 looking at in connection with this case; correct?

25 A. For Palmer Creek Road, yes or Palmer Road creek. Sorry.



1 Q. Had you been advised in connection with your report by  
2 others at Wildlife that oil companies dating back many  
3 decades into the 20th century long before HVI had left oil  
4 deposits in the Palmer Road creek that over time hardened and  
5 remained as a part of the sediment in creek beds?

6 A. I do not recall that.

7 Q. Are you aware of it today?

8 A. I referred to the specific instances in the individual  
9 reports from other individuals that I, um, reviewed as part  
10 of my report.

11 Q. Are you aware today that there was, um, hardened  
12 sediment that -- with -- from oil that dated back many, many  
13 decades with respect to that creek?

14 A. I don't recall that I knew when or the original source  
15 of that. I'm aware that hardened residue was present during  
16 the time of the investigation of these specific spills.

17 Q. In implementing the resource equivalency analysis to the  
18 subject releases, you also set forth in your report and in  
19 your declaration testimony the various processes that you  
20 followed including the factors and calculations you made to  
21 determine the environmental impact as a result of the HVI  
22 releases; correct?

23 A. Yes.

24 Q. Then finally, again, I'm just trying to make sure I  
25 understand what you did. You then calculated and provided

1 cost estimates for the restoration of the subject environment  
2 as a result of all four of the subject releases; right?

3 A. For compensatory restoration.

4 Q. And this restoration cost or calculation was for all of  
5 the interim loss or damage to the environment or ecological  
6 services until the injured habitat recovered to its baseline  
7 condition; correct?

8 A. For those that I documented, correct.

9 Q. And as part of that calculation, you included estimates  
10 as to the length of time it would take to restore the habitat  
11 to its baseline condition prior to the spills; correct?

12 A. Correct.

13 Q. And the natural resource damage for each of the four  
14 spills that you worked on are set forth in your trial  
15 declaration testimony at page 7 lines 5 through 9; is that  
16 right? If you could turn to it, please.

17 A. Yes.

18 Q. And that declaration was signed by you on July 11, 2018;  
19 correct?

20 A. Correct.

21 Q. And the total natural resource damage for the four  
22 spills in the aggregate that you calculated was \$70,338?

23 A. Yes.

24 Q. And nothing has changed in your testimony in that regard  
25 from the time you signed your declaration on July 11, 2018 to

1 today; correct?

2 A. Correct.

3 MR. DIAMOND: Thank you, Dr. Stanton.

4 I have no further questions, Your Honor.

5 MR. ZARRO: I truly have one question, Your Honor.

6 THE COURT: Okay.

7 REDIRECT EXAMINATION

8 BY MR. ZARRO:

9 Q. Dr. Stanton, in your natural resource damage assessments  
10 were you able to calculate the full extent of damage  
11 occasioned by produced water?

12 A. Um, I only included the sections of produced water that  
13 were within the footprint of the oil and response activities.

14 MR. ZARRO: Thank you, Dr. Stanton.

15 MR. DIAMOND: No further questions, Your Honor.

16 THE COURT: Okay. The witness is excused.

17 Who is your next witness?

18 MR. BACHMAN: Your Honor, plaintiffs call  
19 Dr. Yousif Kharaka to the stand.

20 THE CLERK: Please raise your right hand.

21 (Witness sworn.)

22 THE CLERK: Please have a seat.

23 Please state your name for the record and spell  
24 your last name.

25 THE WITNESS: Yousif Kharaka K-h-a-r-a-k-a.

1 MR. BACHMAN: May I approach the witness  
2 Your Honor?

3 THE COURT: Go ahead.

4 DIRECT EXAMINATION

5 BY MR. BACHMAN:

6 Q. Good afternoon, Dr. Kharaka.

7 A. Good afternoon.

8 Q. Did you prepare a trial declaration in this case?

9 A. I did.

10 Q. Do you recognize the document that I just handed to you?

11 A. Yes.

12 Q. Is that the declaration that you prepared for this case?

13 A. Yes, I did.

14 MR. BACHMAN: For the record, Your Honor,  
15 Dr. Kharaka's declaration was filed with the court at Docket  
16 No. 345-13. Plaintiffs offer Dr. Kharaka as an expert in the  
17 safe transport and environmental impacts of releases of crude  
18 oil and produced water from HVI's Bell and Zaca facilities.

19 Plaintiffs would ask to move Dr. Kharaka's trial  
20 declaration into evidence along with exhibits referenced on  
21 pages 3 and 4 of his declaration. The admissibility of these  
22 exhibits has been stipulated to by the parties as shown in  
23 the third joint exhibit stipulation at Docket 430-1.

24 THE COURT: So admitted.

25 MR. BACHMAN: Thank you, Your Honor.

1                   We tender the witness.

2                                   CROSS-EXAMINATION

3       BY MR. SULLIVAN:

4       Q.     Good afternoon, Dr. Kharaka.

5       A.     Good afternoon.

6       Q.     Is your opinion here directed at produced water that was  
7       released in this case?

8       A.     So could you speak up a little bit louder, please?

9       Q.     Sure. Is your opinion here directed at produced water  
10      that was released in this case?

11      A.     Yes.

12      Q.     Do you have any knowledge of what the volumes of the  
13      releases were from HVI of either crude oil or produced water  
14      in this case?

15      A.     So my information on that is based on the reports that  
16      were mentioned earlier by Fish and Wildlife and -- but we did  
17      some sampling ourselves.

18      Q.     But you have no direct knowledge of the actual volumes;  
19      true?

20      A.     No, I do not.

21      Q.     However, you do think that the ratio of produced water  
22      versus crude oil was about 25 to 1; correct?

23      A.     That's correct.

24      Q.     Have you reviewed any of the other expert materials in  
25      this lawsuit regarding the quantification of the releases at

1 issue here?

2 A. I think the answer would be no.

3 Q. In forming your opinion, did you analyze the salinity  
4 tolerance of the environment allegedly impacted by the HVI  
5 releases?

6 A. So because of my training and information that I have,  
7 if I know the chemistry of the water, I can tell you what  
8 plants can tolerate that and what animals and what harm would  
9 be to humans, plants and animals from that system.

10 Q. Did you do any specific study of that as part of your  
11 opinion here?

12 A. No, I did not.

13 Q. With respect to the HVI produced water, did your test  
14 results reflect that 98 to 99 percent of the produced water  
15 was pure H<sub>2</sub>O?

16 A. That would be correct.

17 Q. That's just water; right?

18 A. That's correct.

19 Q. Of the remaining one to two percent of the HVI produced  
20 water is most of that sodium chloride?

21 A. That would be also correct.

22 Q. Which is just salt; right?

23 A. That's correct.

24 Q. Did you see any fruit trees that were damaged or harmed  
25 by releases of produced water at the HVI facilities?

1 A. I did not.

2 Q. Did you observe any animals that had been harmed by  
3 releases of produced water at the HVI facilities?

4 A. I did not and I did not look for them.

5 Q. Did you see any people who were harmed by releases of  
6 produced water at the Greka facilities?

7 A. I did not.

8 Q. Are you aware of any information regarding any person  
9 claiming they were harmed by drinking contaminated ground  
10 water resulting from releases of oil or produced water at the  
11 HVI facilities?

12 A. No.

13 Q. Did you observe any person who was harmed by breathing  
14 air contaminated by chemicals as a result of releases of oil  
15 or produced water at the HVI facilities?

16 A. So I wasn't there at the time of the releases and I did  
17 not do that.

18 Q. Fair enough. Did you observe any animal that was harmed  
19 by breathing air contaminated by breathing chemicals as a  
20 result of releases of oils or produced water at the HVI  
21 facilities?

22 A. The answer would be no.

23 Q. Are you aware that there's method by which the United  
24 States EPA calculates its dollar harm caused by releases of  
25 oil and produced water into the environment?

1 A. Can you repeat the question again?

2 Q. Are you aware that there is a method by which the United  
3 States EPA calculates its dollar harm caused by releases of  
4 oil and produced water into the environment?

5 A. That's not in my area of expertise, but I'm aware of  
6 some of those studies.

7 Q. Did you perform any calculation like that?

8 A. No, I did not.

9 Q. Are you aware of any that have been performed?

10 A. No.

11 Q. Assuming the United States geological sampling of the  
12 HVI produced water from the five well heads you looked at was  
13 accurate, was the produced water much less harmful with  
14 respect to polycyclic aromatic hydrocarbons or PAHs than you  
15 expected?

16 A. The polycyclic aromatic carbons were very low in these  
17 produced waters.

18 Q. Do you agree, Dr. Kharaka, that if a harmful chemical is  
19 diluted sufficiently, it can lose its harmfulness?

20 A. But because there were other chemicals that are also  
21 very harmful, just PAGs. The PAGs did not contribute to the  
22 harm from the produced water in this system.

23 Q. My question, Dr. Kharaka, was just do you agree that if  
24 a harmful chemical is diluted sufficiently, it can lose its  
25 harmfulness?



1 A. Yes, that would be correct.

2 Q. Dr. Kharaka, did you take any samples of any of the  
3 areas beneath or down gradient from the areas where HVI  
4 produced water was released to determine whether the produced  
5 water had been diluted sufficiently to make it no longer  
6 harmful?

7 A. I did not.

8 Q. Do you know how much it was rained during any of the  
9 releases in this case?

10 A. How much rain in that area?

11 Q. During the time of the spills at issue here.

12 A. No, I do not.

13 Q. Did you perform any analysis to determine how much of  
14 the produced water released by HVI evaporated into the  
15 atmosphere?

16 A. I think some of it would evaporate, but I did not do  
17 calculations on that depending on the time of the year and  
18 the temperature and other things.

19 Q. So you would have no idea about that; right?

20 A. Oh, I have a lot of ideas.

21 Q. But you have no actual facts.

22 A. I did not do the calculations.

23 Q. Do you know how many of the spills here occurred on dry  
24 land or in dry creek beds?

25 A. Again, repeat the question, please.

1 Q. Do you know how many of the spills at issue here  
2 occurred on dry land or in dry creek beds?

3 A. Well, some of them did and, um, I would say most of them  
4 in a way. The creeks were either dry or intermittent and so  
5 most of it would be dry or intermittent creeks to start with.

6 Q. Did you perform any analysis, Dr. Kharaka to determine  
7 how much of the produced water released by HVI was collected  
8 during the cleanups?

9 A. Was collected what?

10 Q. During the cleanups of the releases?

11 A. No, I did not. I gather some of it was collected, but I  
12 don't know how much.

13 Q. Do you agree whatever oil is included in or travels with  
14 produced water will not sink down all the way into the ground  
15 water here?

16 A. I think some of it probably would in time. How long it  
17 will take to get there that's an important question to ask.

18 Q. Do you know the extent to which the presence of old  
19 historic asphaltic oil beneath the surface of Palmer Road  
20 creek would act as a barrier to some or all of the produced  
21 water reaching the ground water?

22 A. Yes, that would be correct.

23 Q. Did you sample any ground water in the areas allegedly  
24 affected by HVI's release?

25 A. No, we did not.

1 Q. Did you perform any modeling in the flow of ground water  
2 beneath the surface of the areas allegedly affected by HVI's  
3 releases of produced water?

4 A. We did some conceptual modeling. We did also  
5 geochemical modeling. Model is a big word. It means  
6 different things. We did some modeling, but not the type I  
7 think you're asking.

8 Q. As reflected in Paragraph 6 of your declaration,  
9 Dr. Kharaka, is the most you can say that some of the water  
10 could reach and contaminate the local ground water?

11 A. I would say some of it would, yes.

12 Q. Could.

13 A. Could, would, could. I think would. From my experience  
14 in other areas, the word would be could.

15 Q. Could we take a look at Paragraph 6 of your declaration?

16 A. Do you want me to look at a certain line or just the  
17 whole thing?

18 THE COURT: I think it's Paragraph 6.

19 BY MR. BACHMAN:

20 Q. The last sentence line 16 through 18 or in line 15. In  
21 your declaration you said some of the produced water could  
22 reach and contaminate the local ground water. True?

23 A. That would be my testimony.

24 Q. And that is because after the produced water was  
25 saturated into the ground, it could possibly spread laterally

1 or downward. True?

2 A. So produced water that gets into the soil will be  
3 absorbed into the soil and some of it will flow down. As it  
4 encounters some rocks, it could go sideways. So you can have  
5 lenses of water in that system that can go sideways until  
6 they find rocks that can go down again. So they can go down  
7 or sideways depending on the type of rocks that are there.

8 Q. Did you perform any calculations to determine in  
9 absolute numbers how many gallons of produced water released  
10 by Greka could have made it into the ground water?

11 A. So my estimate of this, and this is only a rough  
12 estimate, would be around 50 percent maybe even higher than  
13 that would try to get into the ground water not immediately,  
14 but eventually.

15 Q. How much below the surface was the ground water?

16 A. I would estimate around 30 feet or so, and this is based  
17 on water in the Palmer Creek. In some areas Palmer Creek is  
18 about 30 feet below the surface and there's some water right  
19 at some of the pits in that system and that to me tells me  
20 that's where the ground water is. So in that system about  
21 30 feet maybe higher in the snow could be a little bit more,  
22 but 30, 40 feet would be what I would estimate.

23 Q. You didn't do any formal analysis or modeling to  
24 determine the likelihood that --

25 A. No, we did not.

1 MR. SULLIVAN: Thank you. No further questions.

2 THE COURT: Mr. Bachman.

3 REDIRECT EXAMINATION

4 BY MR. BACHMAN:

5 Q. What components are in HVI's produced water?

6 A. Um, produced water has a number of chemicals. It's true  
7 that the -- the high concentrations of sodium chloride, but  
8 there are concentrations of other chemicals that are toxic at  
9 extremely low levels. The example that I have in the report  
10 is benzene where the maximum concentration limit in drinking  
11 water is five parts per billion. And we have values in the  
12 water, produced water from that we tested that are  
13 2.1 milligrams per liter 400 times higher than the MCL values  
14 for benzene.

15 We have things like boron that's extremely toxic to  
16 plants. Some plants will only tolerate .5 milligrams per  
17 liter of boron and there's values as high as 44. They go  
18 from 14 to 44 milligrams per liter so 100 times higher than  
19 what the plants can sometimes tolerate.

20 Q. Dr. Kharaka, how do you know what components are in  
21 HVI's produced water?

22 A. Well, we went and sampled five wells in December of 2014  
23 and we went all over. Three from the Cat Canyon and two from  
24 the Zaca fields. And we also took samples of oil from two  
25 tanks in the field and we examined those also.

1 Q. You mentioned oil, crude oil. What components are HVI's  
2 crude oil?

3 A. So things like benzine, for example, are concentrated by  
4 a factor of more than a hundred in the oil tanks. So if you  
5 have two milligrams per liter of benzine in the produced  
6 water, you will have 200 or 200, 300 milligrams per liter in  
7 oil tanks. PAHs are concentrated by a factor of thousands  
8 not just 1,000, many thousands in the oil, in the crude oil,  
9 than in the produced water. So those -- and phenols are  
10 another component that is also very toxic and it's  
11 concentrated in the -- in the crude oil phase.

12 Q. Let's return to our discussion of produced water,  
13 Dr. Kharaka. You mentioned a number of components that you  
14 found in HVI's produced water. What happens when those  
15 components reach the environment?

16 A. Well, they are harmful to everything. So even the  
17 salinity that we have here, it is up to 20,000 milligrams per  
18 liter total. Total is all solids not just sodium chloride.  
19 Total is all solids. You can't drink that water. The plants  
20 can't tolerate it. It's bad for anything that comes in  
21 contact with that water.

22 Q. How much produced water does it take to harm the  
23 environment?

24 A. Well, it depends on what you mean by environment. A  
25 local environment could be damaged by a small amount. The

1 larger environment, of course, would need much larger volumes  
2 to be affected by it.

3 Q. Where did produced water go after it left HVI's  
4 facilities?

5 A. Well, the smallest cells in my opinion would get into  
6 the soil and quickly be absorbed into the soil and flow up  
7 deeper into the ground. Because the rocks at the surface is  
8 sand and gravel, the rocks will -- it's very impacted  
9 mobility in that system. So the water will flow very rapidly  
10 there.

11 Again, until they encounter some lower permeability  
12 rocks, then they can go sideways, and then they can go down  
13 again whenever they find some other higher permeability  
14 rocks. There are also fractures in some of the rocks in that  
15 system. There are faults, small faults, and those are highly  
16 permeable to any water that gets into that system.

17 MR. BACHMAN: May I have one moment, Your Honor?

18 THE COURT: Yes.

19 MR. BACHMAN: No further questions, Your Honor.

20 THE COURT: Anything else?

21 MR. SULLIVAN: Nothing further.

22 THE COURT: Okay. The witness is excused.

23 MR. ZARRO: Do we have time for an additional  
24 witness, Your Honor?

25 THE COURT: Yeah, how long is it gonna take? Who's

1 the next witness?

2 MR. ZARRO: James Foto.

3 MR. SULLIVAN: I don't think it will be very long  
4 at all, Your Honor.

5 THE COURT: Okay.

6 MR. ZARRO: The plaintiffs call James Foto to the  
7 stand.

8 THE CLERK: Please raise your right hand.

9 (Witness sworn.)

10 THE CLERK: Thank you. Please have a seat.

11 Please state your name for the record and spell  
12 your last name.

13 THE WITNESS: James Foto F-o-t-o.

14 DIRECT EXAMINATION

15 BY MR. ZARRO:

16 Q. Good afternoon, Mr. Foto.

17 You are an oil spill prevention specialist for the  
18 Office of Spill Prevention and Response which is part of the  
19 California Department of Fish and Wildlife; correct?

20 A. Correct.

21 Q. In that capacity were you asked to provide testimony on  
22 behalf of plaintiffs in this case today?

23 A. Yes.

24 MR. ZARRO: Your Honor, may I approach the witness?

25 THE COURT: Yes.



1 MR. ZARRO: Your Honor, I have placed Docket 434-2  
2 before the witness.

3 Q. I ask you, Mr. Foto, is that a correct copy of the  
4 testimony you were asked to provide in this matter?

5 A. Yes.

6 MR. ZARRO: Your Honor, I ask that the declaration,  
7 the trial declaration, of Mr. Foto be admitted into evidence.

8 THE COURT: So admitted.

9 MR. ZARRO: I also ask that U.S. 0273 and U.S.  
10 0276 -- I'll start again. I'm sorry.

11 I asked that U.S. 0273 and U.S. 0276 also as they  
12 have been stipulated be admitted into evidence.

13 THE COURT: Admitted.

14 MR. ZARRO: Thank you, Your Honor.

15 I'll pass the witness.

16 CROSS-EXAMINATION

17 BY MR. SULLIVAN:

18 Q. Good afternoon, Mr. Foto.

19 A. Good afternoon.

20 Q. Were you the person responsible for quantifying the  
21 release of crude oil and other material from the Zaca tank  
22 battery spill on January 5, 2008 on behalf of the State?

23 A. Yes.

24 Q. Is the total amount of oil released from the Zaca  
25 facility as a result of the January 5, 2008 spill an unknown

1 number?

2 A. Yes.

3 Q. Is it an unknown number to capture the amount of  
4 material released because there's a large number of outside  
5 forces?

6 A. Can you repeat the question?

7 Q. Sure. Is the actual amount of oil released from the  
8 facility difficult to capture because there are a large  
9 number of outside forces that impact the analysis?

10 A. Possibly.

11 Q. Mr. Foto, on May 14, 2008 did you meet with HVI to  
12 present your calculation of oil recovered from the January 5,  
13 2008 spill?

14 A. What was the date? May?

15 Q. 14-2008.

16 A. I'm not sure of the date. Let's say yes.

17 Q. Is it true that in May of 2008 you presented HVI with a  
18 quantification that there was 23,499 gallons of crude oil  
19 released during the spill?

20 MR. ZARRO: At this point, Your Honor, I'd  
21 interject a 611 B objection based on scope.

22 THE COURT: Overruled.

23 THE WITNESS: Can you repeat that again? Sorry.

24 BY MR. SULLIVAN:

25 Q. Sure. Am I correct that about May 14, 2008 you provided

1 a quantification that reflected that the amount that was --  
2 of crude oil that was released during the spill was a total  
3 of 23,499 gallons?

4 A. Did you say released or recovered?

5 Q. Recovered. I said released, but I should have said  
6 recovered.

7 A. I would have to do some quick math, but that sounds  
8 about right.

9 Q. That would be about 560 barrels of oil?

10 A. Yes.

11 Q. Am I correct that on September 23rd, 2008 you later  
12 submitted an official quantification report to the State of  
13 California that mistakenly concluded that 44,500 gallons of  
14 oil had been recovered after the January 5, 2008 spill?

15 MR. ZARRO: Objection. 401, characterization of  
16 the document. Also, 403.

17 THE COURT: Overruled.

18 THE WITNESS: Can you repeat one more time?

19 BY MR. SULLIVAN:

20 Q. Sure. Am I correct, Mr. Foto that on September 23rd,  
21 2008 you submitted an official quantification report to the  
22 State of California that mistakenly concluded that there were  
23 44,500 gallons of oil recovered after the January 5, 2008  
24 spill?

25 MR. ZARRO: Same objection.

1 THE COURT: Does he have the report?

2 MR. SULLIVAN: I have his deposition testimony  
3 about it, Your Honor.

4 THE COURT: Okay. Maybe you should ask him if he  
5 remembers.

6 BY MR. SULLIVAN:

7 Q. Do you remember being asked in your deposition about a  
8 September 23rd, 2008 quantification report in which there was  
9 an error in the amount of gallons?

10 A. Yes.

11 Q. And in fact you did make an error in the official report  
12 that you submitted on September 23rd, 2008; right?

13 A. The report that was submitted was a draft at that point.

14 Q. But that report had 44,500 gallons whereas the May 14th  
15 report only submitted 23,499 recovered.

16 A. Correct.

17 Q. And it was the first report that was correct; right?

18 A. Correct.

19 Q. Did you only discover that when your counsel and  
20 Mr. Zarro alerted you to that in 2013?

21 A. No.

22 Q. When did you discover that?

23 A. I don't think it was Mr. Zarro that discovered it. It  
24 was Mr. Bledsoe, I believe, his name was.

25 Q. But you first learned it from a lawyer when you were

1 working on this case?

2 A. Correct.

3 Q. Mr. Foto, when you determined how much oil was recovered  
4 after the January 5, 2008 spill, is it true that you did not  
5 do any analysis with respect to whether the oil that was  
6 recovered had stayed within the earth and containment berm  
7 versus ended up on a dirt road versus how much ended up in  
8 the creek?

9 A. One more time, please.

10 Q. Sure. Mr. Foto, when you determined how much oil was  
11 recovered after the January 5, 2008 spill, is it true that  
12 you did not do any analysis to determine how much oil stayed  
13 within the earth and containment berm versus how much ended  
14 up on a dirt road versus how much ended up in the creek?

15 A. Correct.

16 Q. So some of the recovered oil came from within the earth  
17 and containment berm area. True.

18 MR. ZARRO: Objection. Assumes facts not in  
19 evidence. No one's testified to that.

20 THE COURT: Sustained.

21 MR. SULLIVAN: He just testified that there was  
22 crude oil within the earth and berm containment area.

23 MR. ZARRO: Assumes the next step, Your Honor.

24 THE COURT: Sustained. Move on.

25 BY MR. SULLIVAN:

1 Q. Mr. Foto, do you know how much of the oil that was  
2 recovered could have been from the containment area behind  
3 the earth and berm?

4 A. No.

5 Q. Mr. Foto, I would like to have you be shown Plaintiff's  
6 Exhibit No. 273 at page 20. Is this a calculation done by  
7 HVI's production foreman Scott Proskow calculating the rate  
8 of the injection pump that continued to operate and continued  
9 to empty the tank at a rate of 530 barrels per hour according  
10 to his calculation?

11 A. It appears so.

12 Q. Mr. Foto, you do not have any basis whatsoever to  
13 disagree with that number meaning that second injection pump  
14 was emptying the tank at a rate of 530 barrels per hour.  
15 True?

16 A. Please repeat.

17 Q. Mr. Foto, you do not have any basis whatsoever to  
18 disagree with that number meaning that the second injection  
19 pump was emptying the tank at a rate of 530 barrels per hour.  
20 True?

21 A. True.

22 Q. Mr. Foto, you learned from a conversation with  
23 Lieutenant Gross that HVI removed 250 gallons from the waste  
24 water tank by a vacuum truck. True?

25 A. I do not remember that.

1 Q. I'd like to have you take a look at page 54 lines 1  
2 through 23 of your deposition taken on August 3rd, 2016 to  
3 see if that will refresh your recollection.

4 A. Can you repeat the location of that?

5 Q. I'm just taking a look at page 54 lines 1 through 23.

6 A. Okay, yes.

7 Q. That does refresh your recollection that's what you  
8 learned from Lieutenant Gross.

9 A. Correct. True.

10 Q. And was that removal to facilitate the clean up by  
11 removing the oil that was remaining in the tank which needed  
12 to be emptied?

13 A. Most probably, yes.

14 MR. SULLIVAN: Thank you. No further questions.

15 MR. ZARRO: Yes, Your Honor. I have a few.

16 THE COURT: Go ahead.

17 MR. ZARRO: Thank you, Your Honor.

18 REDIRECT EXAMINATION

19 BY MR. ZARRO:

20 Q. You were asked by Mr. Sullivan about your role in  
21 quantifying the oil spilled in the January 5, 2008 Zaca  
22 incident. Do you recall your testimony?

23 A. Yes.

24 Q. Can you let the Court know a little bit more about your  
25 role as an oil spill prevention specialist in the

1 quantification of oil recovered during an oil spill response?

2 A. My role is to oversee the collection and quantification  
3 of the recovered oil from that release. And working with  
4 Greka and their representatives that they hired.

5 Q. Did you work with representatives -- you understand that  
6 the defendant is HVI. That's how we're referring to them  
7 today.

8 A. Okay.

9 Q. Did you interface with HVI contractors during the course  
10 of the January 5, 2008 --

11 MR. SULLIVAN: Your Honor, I would object this is  
12 outside the scope of cross.

13 THE COURT: Overruled.

14 THE WITNESS: Yes.

15 BY MR. ZARRO:

16 Q. Do you remember who?

17 A. Yes.

18 Q. Can you tell the Court?

19 A. There were three companies. One was Sabolt and I  
20 believe his name was Mr. Castillo and there was LFR and  
21 Kohl's Services and I think it was Mr. Beetle. And I can't  
22 remember the other person.

23 Q. There are spreadsheets in your files which are -- I'm  
24 sorry, Your Honor.

25 I would ask that, tell you what, you created



1       spreadsheets of the quantification materials recovered and  
2       put them into your files. Do you recall doing that?

3       A.     Correct.

4       Q.     Where did the information that you put into those  
5       spreadsheets come from?

6               MR. SULLIVAN: Objection, Your Honor. Overbroad.

7               THE COURT: Sustained.

8       BY MR. ZARRO:

9       Q.     Could you please put U.S. 0273 on the screen for us. I  
10       need you to go all the way to the end of this document. It  
11       would be DFG 002601. Do you recognize this as the first page  
12       of a spreadsheet?

13       A.     Yes, I do.

14       Q.     Is this a spreadsheet you included in your files?

15       A.     Yes, it is.

16       Q.     What does it purport to represent?

17       A.     It represents each bin along with the weight of the bins  
18       along with the percentage of TPH, and then it shows the  
19       gallon amount on the last line far right side.

20       Q.     And the information that is included in this spreadsheet  
21       where did it come from?

22       A.     This came from LFR.

23       Q.     Thank you. Can you go to 26001?

24               Mr. Foto, do you recognize this document?

25       A.     Yes.

1 Q. Can you tell me what it is?

2 A. This is the amount of oil in water recovered in liquid  
3 form inside frak tanks.

4 Q. The information that you included in this spreadsheet,  
5 where did it come from?

6 A. This, this one's mine. This came from me.

7 Q. Did you use information from Greka contractors to  
8 assist?

9 A. Correct.

10 Q. Which one?

11 A. Sabolt.

12 Q. Okay. Thank you. Do you recognize the document that we  
13 put before you?

14 A. Yes, I do.

15 Q. What is it?

16 A. This was a draft that I was working on. Obviously, you  
17 can see it has the liquids, the solids, and then I hand wrote  
18 some other information in there. I was trying to come up  
19 with the produced water amount.

20 Q. Is this the document that you were referring to in your  
21 testimony with Mr. Sullivan?

22 A. Correct.

23 Q. Did you come to any conclusions how much produced water  
24 was released?

25 A. No.

1 Q. Would you characterize this document as an official  
2 report?

3 A. No.

4 Q. What information did you use to come up with a number  
5 32,943.5 gallons recovered in liquids?

6 A. That was, um, information that I was told by the wardens  
7 when they were discussing some possible missing oil that they  
8 thought might have been removed. And at this point, um, I  
9 had this written down on this form here, and then as we moved  
10 further along in the case, I decided not to include that  
11 because we didn't have any hard proof on that so I just kept  
12 what the contractors had.

13 MR. ZARRO: Thank you. I have no further  
14 questions.

15 Thank you, Your Honor.

16 MR. SULLIVAN: Nothing further.

17 THE COURT: Okay. The witness is excused.

18 I think we'll recess until tomorrow. We'll start  
19 tomorrow at 9:00 a.m. And just so I'm clear, the next  
20 witnesses are gonna be the next witnesses on the list pretty  
21 much?

22 MR. GLADSTEIN: Yes, Your Honor.

23 THE COURT: See you tomorrow.

24 (Proceedings were concluded at 4:30 p.m.)  
25



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